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A REPORT TO THE PRESIDENT

UNITED STATES

BY

E PRESIDENT'S COMMISSION ON THE HEALTH NEEDS OF THE NATION

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A REPORT TO THE PRESIDENT

THE PRESIDENT'S COMMISSION ON THE HEALTH NEEDS OF THE NATION

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ASSIGNMENT FROM THE PRESIDENT

Establishing the President's Commission on the Health Needs of the Nation

WHEREAS our Nation's strength is directly dependent upon the health of its people; and

Whereas the needs of our military, defense-production, and civildefense programs for an assured and adequate supply of personnel and services present special problems in the allocation of our health resources during this emergency period; and

WHEREAS it is essential that at all times adequate provision be made to meet the health needs of the general public, including veterans; and

WHEREAS an objective appraisal of the effect of actions taken to provide for immediate and emergency needs is essential at this time in order that we may continue to meet long-term requirements for safeguarding and improving the health of the Nation:

Now, THEREFORE, by virtue of the authority vested in me as President of the United States, it is ordered as follows:

Section 1. There is hereby established a commission to be known as the President's Commission on the Health Needs of the Nation, which shall consist of a chairman and fourteen other members to be designated by the President.

Section 2. The Commission is authorized and directed to inquire into and study the following:

- (a) The current and prospective supply of physicians, dentists, nurses, hospital administrators, and allied professional workers; the adequacy of this supply in terms of the present demands for service; and the ability of educational institutions and other training facilities to provide such additional trained persons as may be required to meet prospective requirements.
- (b) The present ability of local public health units to meet demands imposed by civil-defense requirements and by the needs of the general public during this mobilization period.
- (c) The problems created by the shift of thousands of workers to defense-production areas requiring the relocation of doctors and other professional personnel and the establishment of additional facilities to meet health needs.
- (d) The degree to which existing and planned medical facilities, such as hospitals and clinics, meet present and prospective needs for such facilities.

- (e) Current research activities in the field of health and the programs needed to keep pace with new developments.
- (f) The effect upon the continued maintenance of a desirable standard of civilian health of the actions taken to meet the long-range requirements of military, civil-defense, veterans' and other public service programs for medical personnel and facilities.
- (g) The adequacy of private and public programs designed to provide methods of financing medical care.
- (h) The extent of Federal, State, and local-government services in the health field, and the desirable level of expenditures for such purposes taking into consideration other financial obligations of government and the expenditures for health purposes from private sources.

Section 3. The Commission shall present to the President in writing such interim reports and final report of its studies of the subjects designated in section 2 of this order, including its recommendations for governmental action, either legislative or administrative, as it shall deem appropriate.

Section 4. In connection with its inquiries and studies, the Commission is authorized to hold such public hearings and to hear such witnesses as it may deem appropriate.

Section 5. All executive departments and agencies of the Federal Government are authorized and directed to cooperate with the Commission in its work and to furnish the Commission such information and assistance, not inconsistent with law, as it may require in the performance of its functions and duties; but this order shall not be construed as otherwise modifying the functions or responsibilities of any such department or agency.

Section 6. The expenditures of the Commission shall be paid out of an allotment made by the President from the appropriation entitled "Emergency Fund for the President, National Defense" (Title III of the Independent Offices Appropriation Act, 1952, Public Law 137, 82d Congress, approved August 31, 1951). Such payments shall be made without regard to the provisions of (a) section 3681 of the Revised Statutes of the United States (31 U. S. C. 672), (b) section 9 of the act of March 4, 1909, 35 Stat. 1027 (31 U. S. C. 673), and (c) such other laws as the President may hereafter specify.

Section 7. The Commission shall cease to exist thirty days after rendition of its final report to the President under section 3 of this order, or one year after the date of this order, whichever shall first occur.

HARRY S. TRUMAN.

THE WHITE HOUSE,

December 29, 1951.

THE COMMISSION

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Clarence Poe, President and Editor, The Progressive Farmer, Raleigh, N. C.

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Walter P. Reuther, President, United Automobile Workers, CIO, Detroit, Mich.

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LETTER OF TRANSMITTAL

Washington, D. C., December 18, 1952.

DEAR MR. PRESIDENT: As Chairman of the President's Commission on the Health Needs of the Nation I have the honor of submitting to you the Commission's report and recommendations.

When I took on this task a year ago, you gave me a free hand in the choosing of the Commission members and in the manner in which this huge task would be tackled. I am grateful, Mr. President, that neither you nor any member of the executive branch of the Government ever exercised the slightest bit of pressure on the workings of this group.

I am very proud of the hard-working, conscientious members who comprise this Commission. Dealing with a highly controversial subject, and representing many divergent points of view in our society, they nevertheless have sat around the table like good Americans and threshed out their differences in amicable fashion. Their experience is clear proof that these issues can be discussed intelligently without resorting to misleading slogans or heated invective.

In our work, we have had the indispensable aid of a highly competent staff which has put in unbelievably long hours. In all of its work, the staff has subordinated its own opinions in a sincere effort to interpret accurately the will of the Commission.

There is one major thread of philosophy which runs through every phase of this report. We Commissioners believe that providing good health care starts at the grass roots. The building up of our health resources in terms of training more health personnel and providing more physical facilities must start from the ground up. We have recommended Federal grants-in-aid to these and other necessary activities because we believe that the role of the Federal Government is to stimulate them, not to control them. Government must take the leadership in the promotion of good health; its major energies should go here rather than in extensive direct operation of health services.

The Commission hopes for a thoughtful reception of its labors. The provision of better health services to the 155 million people of this great land is too stirring a challenge to be sidetracked by partisan considerations. In all humility, we think this report lays the groundwork for men of good will to unite in a common effort to improve the people's health, the backbone of our democratic strength in a free world.

Respectfully,

Paul B. Magnuson, M. D.

PREFACE

On December 29, 1951, the President of the United States announced that he had signed an Executive Order creating the President's Commission on the Health Needs of the Nation.

"The Commission has one major objective," the President wrote. "During this crucial period in our country's history it will make a critical study of our total health requirements, both immediate and long-range, and will recommend courses of action to meet these needs."

The members of the Commission met for the first time on January 14 and 15. We fully realized the magnitude of the task before us, and we made the following fundamental decisions which have guided Commission policy throughout the year:

- 1. Insofar as it was humanly possible to lay aside any preconceived bias and approach this huge task with open minds.
- 2. To reach no conclusions until we had heard all the evidence which could be assembled in the time available and to scour the country to find the experts and unearth the studies which would supply us with the basic data.
- 3. To hold unwaveringly to the policy of listening to all points of view on any question, making a special effort to hear members of organizations which had expressly criticized the formation of the Commission.
- 4. To eliminate political considerations from our deliberations and recommendations, and to issue no interim reports prior to the conclusion of our work.

Method of Work

Because of the limitation of time, it was necessary to crowd a tremendous amount of work into one year. For this reason, a precise outline of activity was drafted at one of our early meetings.

It was decided, first of all, to assess the total health resources of the country—digging into the complexities of numbers and location of health personnel, the status of hospital and other health facilities, the extent of prepaid health protection (insurance coverage), governmental and private expenditures for medical care, and all other health assets. Throughout the year, a technical staff has been compiling statistical materials and presenting them for our

use. These technicians have assembled a vast amount of data. For example, in preparation for the October panels on the financing of a health program, they brought out a helpful book of statistics on medical economics garnered from 250 separate governmental and private sources. Much of the material compiled by the staff has been brought together in unified fashion for the first time and for that reason a good deal of it is being included in our final report.

Panel Meetings

The second phase of our working plan—estimating the health needs of the American people—was actually the most difficult of our tasks. Because the needs covered so wide a range, some general in nature and others affecting specific segments of our population, we decided to hold a series of one-day panels in Washington on the health fields with the most critical needs. As soon as each panel subject was selected by the Commission, lists of medical and lay experts on the particular subject were culled to obtain a group of ten or twelve people who would be most representative of varying schools of thought. In addition to planning and organizing each panel, the staff prepared basic statistical data and a bibliography pertaining to the subject.

In the panel meetings which were designed to get as much open, democratic discussion as possible, the participants presented their points of view without the restrictions imposed by a formal statement. After an initial statement of some of the basic issues in a specific area, the Commissioner in charge of the panel turned the discussion over to the experts, who spent the next eight to ten hours examining the specific subject to which they were assigned. An official transcript was made of each of these panel discussions.

The first panel, on April 8, considered the problems affecting general medical practice. The final panel, at which twenty-one of the Nation's outstanding authorities discussed the thorny question of the financing of medical care, extended over a two-day period, October 7 and 8. Between April and October, separate all-day panels were held on specialization, group practice, regionalization, promotion of health, prevention of disease, rehabilitation, medical education, health of the aging, mental health, care of the chronically ill, research, industrial health, supply and training of nurses, veterans and other Federal beneficiaries, rural health, military medicine, supply and training of paramedical personnel, health of mothers and children, environmental health services, financing of education and research, public medical programs, dentistry, and hospitals.

More than 400 experts appeared at these panel sessions, and we are deeply grateful to the many national medical, labor, farm, consumer, industrial, and educational leaders who came to these Washington meetings. The official record of these panels, which runs to more than two million words, is a mine of information and is proof positive of the deep interest of Americans in better medical care for all.

The task of boiling this material down to the point where the Commission could assimilate it was accomplished in two ways. First of all, from each of the panels one of its participants was selected to draw up a summary. This summary document was circulated to all of the panel participants for further comment and criticism. It then went to every member of the Commission for further study and comment.

Secondly, we scheduled a series of two-day meetings each month which were known as joint panel sessions. At these joint sessions, two or three participants from each of the panels held during the previous month came together for a summary of their findings and extensive questioning by the full Commission membership. The first of these joint sessions, which combined general practice, group practice, specialization, and regionalization, was held on May 13 and the last, which covered military medicine, hospitals, veterans' medical care and public medical programs, came on August 13.

Regional Hearings

Despite this considerable amount of work in Washington, we felt strongly the need to go out to the grass roots and determine how the people really felt on the big health questions of the day. Therefore, a series of eight hearings was scheduled in different parts of the country. We invited anyone who wanted to come in to testify at these hearings, purposely avoiding a prescribed agenda or a restricted list of witnesses or topics.

Hearings were held in Philadelphia, Dallas, Raleigh, Minneapolis, St. Louis, Detroit, Cleveland, and San Francisco. The public outpouring at these hearings was so great that a number of them ran two to three hours beyond the scheduled closing time.

To the hundreds of people from all walks of life who testified at these hearings—physicians, labor leaders, ministers, farmers, university officials, Governors, Mayors, housewives, industrialists, medical school deans, insurance executives, lawyers, health council leaders, voluntary health organization representatives, dentists, nurses, social workers, home demonstration agents, and just plain citizens—we are beholden. We have been so impressed with the

unusually high quality and freshness of the material gathered at these field hearings that we are issuing a separate volume containing highlights from the 600,000 words of official field transcripts.

In addition to the individual panels, joint panels, and public hearings, a series of monthly Commission meetings was held, usually two days in length, at which procedures and plans were mapped out. In the final stages of work leading up to the recommendations, we met for six days in October and five days in November.

The Report

From our consideration of the panel work, regional hearings and data collected by the staff has emerged the findings and recommendations. These are reported in five volumes.

Volume I, Findings and Recommendations, includes the Commission's principles, major findings, and recommendations.

Volume II, America's Health Status, Needs and Resources, presents details on the findings and considerations which led to the recommendations.

Volume III, America's Health Status, Needs and Resources—A Statistical Appendix, contains the tables and charts which support the second volume.

Volume IV, Financing a Health Program for America, contains the statements submitted by members of the panel on financing, a collection representing the different points of view so well expressed that they were judged to merit separate publication. It also includes an annotated statistical review of the financing of health services, education, and research.

Volume V, The People Speak, presents excerpts from the regional hearings.

The Commission has expressed itself in Volume I. The remaining four volumes represent the work of the staff and the hundreds of other people who assisted us in this task.

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IX.

INTRODUCTION

The maintenance of health must now be added to food, shelter, and clothing as one of the necessities of living. Health means more than freedom from disease, freedom from pain, freedom from untimely death. It means optimum physical, mental, and social efficiency and well-being. The individual ranks health for himself, and for his family even more, high in the scale of human aspirations. For the State, health is the wellspring of a nation's strength, its provision and protection one of the first obligations.

Health reflects dynamically the measure of man's control over his environment and his ever-changing adjustment to it. Health makes possible the maximum self-expression and self-development of man. It is the first prerequisite for leading a full life. The degree to which individuals, voluntary groups, and the State cooperate successfully in providing for the health of all represents the maturity and level of civilization of the Nation.

Importance of Health Services

Failure to safeguard health, whether through ignorance, neglect, or the lack of means, exposes the individual to suffering, incapacity, or death. National neglect of proper measures for the preservation of health exposes the country to weakness and destruction. The goal of optimum physical, mental, and social efficiency and well-being justifies all prudent efforts for its attainment—whether these be social measures necessary for the promotion of health; application of technical skills in the prevention of disease, diagnosis, treatment and rehabilitation; training of specialized personnel; expansion of facilities; or the organization necessary to make health services available to all.

The increased importance of health services to the individual and the Nation, and the changed social viewpoint that has emerged as a result of the acquisition of procedures that are truly life-saving, necessitate a re-evaluation of our attitudes toward providing them. We need a set of principles which, while embodying due regard for the strong traditions and sound practices of the past, take cognizance of the epoch-making

changes of the present and the potentialities of the future. There was a time, only a few decades back, when our state of medical knowledge was such that it severely limited endeavors to improve the health of the people through the extension of medical services. That day is past.

It is now abundantly clear that the provision of adequate health services profoundly affects the individual's chances of survival and the strength and happiness of the Nation as well. This fact imposes certain ethical and practical considerations upon us. When the very life of a man, or the lives of his family, may depend upon his receiving adequate medical services, society must make every effort to provide them. When this man knows that such health boons exist, available to some and denied to him, a free society will find the way to comply with the demand that he will surely make. These benefits sometimes can be obtained by the individual's own effort; but when these efforts fail. other means must be found. And democracy requires that the same high quality of service be made available to all men equally.

Individual and Social Responsibility

The individual effort of an informed person will do more for his health and that of his family than all the things which can be done for them. In the past, measures for health maintenance demanded individual responsibility only to a limited degree. The development of pure water supplies, pasteurization of milk, and other sanitary accomplishments were achieved through social action in which the individual may have participated as a citizen, but was required to take no further individual responsibility.

Future accomplishments, however, depend to an even greater degree upon the individual's assumption of responsibility for his own health. It is the individual who must consult his physician for early care, avoid obesity and alcholism, and drive his automobile safely. These things cannot be done for him. They require both information and motivation. Personal health practices which are determined by the individual's knowledge,

attitude and decision have now become of paramount importance in gaining health. Effort by each person to improve his own health can be expected to pay great returns.

Recognition of the significance of individual responsibility for health does not discharge the obligation of a society which is interested in the health of its citizenry. Such recognition, in fact, increases social responsibility for health. Heretofore social effort in behalf of health has been limited largely to such measures as delivery of pure water to the individual's tap and the sanitary disposal of his sewage. Now it becomes necessary for a society which wishes to advance the health of its citizens to adopt measures which guarantee to the individual an opportunity to make appropriate decisions in behalf of his health. Society must assure its citizens access to professional services, education concerning personal health practices, and a reasonably safe physical environment. Only then can individual responsibility for health exercised through personal action reach its full potential.

As a matter of fact, for most of those who now lack comprehensive health services, the reason lies in large measure beyond individual control. The individual may not be sufficiently well informed to appreciate the benefit and hence does not actively demand it. In many other instances, the health personnel and facilities do not exist in the area in which he lives. Moreover, an individual may be fully convinced of the primary value of the best health service for himself and his family, yet not have available the money to purchase it or the arrangements to secure it.

Government and Health Services

Hence, the community—and particularly the most responsible community organization, government—must participate in the expansion of means to achieve health. In assuring the development of proper facilities and in seeing that comprehensive health services are made available to all, the local, State, and Federal governments have both separate and joint responsibilities.

The local community (or region) should be the focus for the administration of most of the direct medical services provided to the individual. Its local health unit should be adequate to the task of supplying community-wide sanitation and preventive services. Its citizens should supply much of the initiative needed to expand its medical plant and induce medical personnel to practice in the area. At public hearings across the country we were deeply impressed with the work

of voluntary local health councils in stimulating imaginative community planning, leading to direct action in the health field.

State governments have many responsibilities in the health field in addition to giving both financial and advisory assistance to local community health services. They have the traditional responsibility of caring for the mentally ill and the tuberculous. State health departments have vast responsibilities in planning the expansion of health resources and in stimulating Statewide attacks on disease.

The Federal Government, first of all, is responsible for seeing that our Nation's military personnel and our veterans get the highest quality of medical care. It also must provide services to such special groups as merchant seamen and Indians.

Then, since the good health of our people is a national resource, the Federal Government has a major responsibility for promoting and stimulating a comprehensive health program for all our people. The Federal Government, therefore, must provide leadership and initiative in planning the development of our health resources. Of particular importance is the obligation of our Nation's Government to equalize the opportunities for health among the citizens of the various States through use of the Federal taxing power to overcome the disadvantages of low-income States. Grants-in-aid to State and local governments to help them carry out their responsibilities in the health field should continue as an important form of national assistance. One of the most important roles of the Federal Government in health is to act as a catalyst, to stimulate new programs and to expand existing ones. In this connection the grant-in-aid principle has already proved itself to be an effective mechanism for arousing state and local effort. Finally, the Federal Government must take whatever other steps prove necessary to safeguard what is probably our most important national resource—the health of our people.

Frequently, it is hard to draw the line where the responsibility of one segment of government leaves off and another begins. In reality, a feeling of partnership should pervade all levels of government for both the initiation and maintenance of health programs. Each level of government can perform certain functions in health with greatest effectiveness, and this should be the real criterion in assigning tasks.

In considering the roles of the individual and various elements of Government in securing health services, one must not lose sight of a most precious relationship for health. Throughout the whole history of civilized man the relationship between patient and physician has been a special thing. In days when scientific knowledge was scanty, this relationship yielded about all the benefits the patient received. Even today, all the complex arrangements that exist to provide medical care have not replaced it. The patient's confidence in his physician underlies most successful care. But now the physician needs more than knowledge of human nature and love of mankind. To be effective in the modern sense he must have the help that the modern hospital supplies, the assistance of trained helpers, and adequate facilities.

Comprehensive Health Services

The physician no longer makes his sole contribution to the health of individuals and the Nation by treating disease. Now, a broader view of health service is being developed—one that takes into account more than what a physician does in the diagnosis and treatment of disease. It includes things that are done in the absence of disease, namely, the promotion of health and prevention of disease; and what is done beyond the ordinary treatment of disease, namely, rehabilitation. This view, a spectrum of comprehensive health services, specifically includes the contribution of a variety of personnel and of community services. The physician leads the over-all effort, but as one member of a well-trained team comprised of dentists, nurses, technicians, and many other professional health workers. Only through such joint endeavor can the whole range of services be delivered.

To be most effective the health team, with community and national support, must achieve a smooth continuum of care—embracing promotion of health, prevention of diseases, diagnosis and treatment, and rehabilitation—all of which is constantly improved through education and research.

Health Principles

From such considerations the Commission has formulated these principles to be used as a guide in approaching our health problem.

WE BELIEVE THAT:

- 1. Access to the means for the attainment and preservation of health is a basic human right.
- 2. Effort of the individual himself is a vitally important factor in attaining and maintaining health.
- 3. The physician-patient relationship is so fundamental to health that everyone should have a personal physician.

- 4. The physician should have access to proper facilities and equipment, affiliation on some basis with a hospital, and the help of trained personnel in order to fulfill his part in providing comprehensive health services.
- 5. Comprehensive health service includes the positive promotion of health, the prevention of disease, the diagnosis and treatment of disease, the rehabilitation of the disabled—all supported by constantly improving education of personnel and a continuous program of research.
- 6. Comprehensive health service is the concern of society and is best insured when all elements of society participate in providing it.
- 7. Responsibility for health is a joint one, with the individual citizen and local, State, Federal governments each having major contributions to make toward its fuller realization.
- 8. The American people desire and deserve comprehensive health service of the highest quality and in our dynamic expanding economy the means can be found to provide it.
- 9. The same high quality of health services should be available to all people equally.
- 10. A health program must take into account the progress and experience of the past, the realities of the present, and must be flexible enough to cope with future changes.

We set as a goal for this Nation a situation in which adequate health personnel, facilities, and organization make comprehensive health services available for all, with a method of financing to make this care universally accessible. We are confident that many of the great plagues of the past can be eradicated; present knowledge makes possible the extermination of tuberculosis, syphilis, typhoid fever, diphtheria and other diseases. We look forward to the control of poliomyelitis, cancer, and many forms of heart disease. We expect to see a splendid hospital system with every area of the country provided with an adequate number of beds, and the obsolete structures of the past replaced by new facilities which embody all the modern advances. We seek the expansion of our educational system so that an adequate number of physicians and all other needed health personnel will be trained, with every qualified boy and girl having an equal opportunity to enter the professions. We favor continued research into health problems, including the training of an adequate number of scientific workers and providing them with facilities to carry out their work.

We believe it is well within the economic potential of this country to provide itself with the finest system of medical care in the world, that the American people desire this and deserve no less. We believe that it is true economy to invest in bigger and better health services, since the cost of adequate health promotion and protection is probably far less than the cost involved to the Nation through its neglect of health. The added contributions a healthier people could make to a better and more secure life for all justify increased expenditures for these purposes.

Apart from humanitarian considerations, the dollarand-cents savings in the reduction of disease and disability more than justify increased expenditures for better health services.

Finally, we are convinced that the good health of the American people is a powerful democratic resource in our effort to build a united, free world. By the same token, our civil defense health services can be only as strong as the resources which underlie them. Constant planning and building of our basic health services, therefore, strengthen the ramparts of civil defense and increase the vitality of our leadership in the free world.

THE AMERICAN PEOPLE AND THEIR HEALTH

The United States is today a rapidly growing Nation, with a highly mobile people. Both the oldest and the voungest parts of the population are increasing in proportion to the income-producing ages.

Our growing scientific understanding and the application of technical knowledge have led to a vastly increased productivity with a steady rise in the standard of living, and a greater amount of leisure time available to the individual. This industrial development has also changed the patterns of employment, with shifts from unskilled to skilled workers, a decline in the proportion of farmers, and a rise in the proportion of service workers. These factors have helped to stimulate one of the most basic and significant changes affecting the population-the sharp increase in the amount of schooling which young people receive.

These and other facts about the population are so fundamental to an understanding of our health problems and the ways to their solution, that we must consider them before approaching the matter of health resources and the health needs of our country.

Our Population

Over the last 50 years, the population of the United States has doubled-from 76 million in 1900 to 151 million in 1950. It is expected to reach 193 million by 1975.

THE POPULATION OF THE UNITED STATES INCREASED FROM 76 TO 151 MILLION IN THE FIRST HALF OF THIS CENTURY



1975, Unofficial Estimate Prepared in Consultation With the Bureau of the Census.

The population at a given time is the result of three factors: the birth rate, the death rate, and net migration. Until about 15 years ago, the birth rate in this country showed a steady decline, and many students believed that low birth rates would be a continuing pattern in American life. The birth rate had dropped from more than 30 per 1,000 population in 1900 to less than 19 in the depression years of the thirties. With the beginning of the defense program at the end of the thirties, this trend was reversed sharply. The high birth rates in the 1940's still continue, and for the last four vears the rate has averaged about 25 per thousand population. Each year over 3.5 million babies are born. Even if these high rates do not continue, we will have a high proportion of children in the population for some time to come.

The decline in the total death rate in the United States is markedly affecting both the size and the age composition of the population. Decreasing death rates together with the low birth rates of twenty-five years ago and heavy immigration during the first two decades of this century have meant an increased proportion of older people. Less than one-fifth of the population in 1900 was over 45 years of age, a proportion which had increased to more than one-fourth by 1950 and is ex-

pected to reach 31 percent in 1960. Thus both the youngest and the oldest groups in the population are showing a greater increase proportionately than the middle groups.

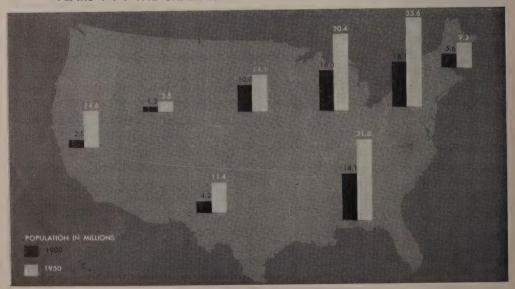
Immigration has not played an important role in the population growth of the entire country since the early twenties. Today, however, internal migration is highly important in determining the population of the various sections of the country.

Mobility of the Population

Americans are always on the move. Four to five million people move from one State to another in the course of a year, and another 4 or 5 million from one county to another within a given State. This migration has played a major role in regional growth and urbanization of the country.

Internal migration has carried our people mostly to the west. This westward movement is shown by an increase in the proportion of the population in the three regions: Southwest, Rocky Mountain, and Far West. In 1900, only 10 percent of the population of the country resided in these three regions; by 1950, nearly 20 percent lived there.

THE POPULATION OF EVERY REGION HAS INCREASED IN THE LAST 50 YEARS . . . THE SHARPEST INCREASE HAS BEEN IN THE WEST



Source: Bureau of the Census.

Movement to the cities and suburbs has also characterized American life in the last 50 years. In 1910, 46 percent of the population lived in cities, 35 percent on farms. By 1950, almost two-thirds lived in cities and only 16 percent on farms.

Industrialization and Education

The industrialization of our society, with its widespread substitution of machines for physical labor, has caused profound changes in occupational patterns. Smaller proportions of the population are now engaged in farming and unskilled labor than formerly. Although the proportion of highly skilled workers and craftsmen has remained fairly constant, semi-skilled workers have increased with the expansion of laborsaving machines in manufacture. Greater production of consumer goods, development of new industries and great expansion of service industries have all helped to absorb the workers dislocated by machines. By 1950, only 13 percent of the employed population were engaged in farming, while 34 percent were in manufacturing, mining, and construction, and 53 percent were in service industries.

In the future, as even more efficient machines are used for production, an expansion of personal service occupations, including health services, can furnish employment opportunities for those workers replaced by machines.

Education in a democratic society provides the basic understanding on which equal liberty and equal opportunity can be secured, and from which our sense of social responsibility arises. Compared to most countries of the world, the United States enjoys a high level of literacy. In 1950, one-half of the persons 25 years of age or over had completed nine years of school. This index of education shows considerable variation among the States and population groups. While the average white adult living in a city had completed eleven years of school, his Negro counterpart living on a farm had finished only the fifth grade.

Solutions to family health problems are tied up with family incomes. In 1949 about half of the families in the United States had incomes of less than \$3,000. Urban families had the highest median income, \$3,430; and rural farm families, the lowest, \$1,730. Great variation in family income is found among the several States. Families living in the Southeast had a median family income of \$2,000; in the Far West, \$3,570. Mississippi had the lowest median family income, \$1,200.

Health and Its Measurement

Neither health nor ill health can be precisely defined. Health is a spectrum which runs from perfect health, however defined, at one end through varying degrees of ill health to serious illness resulting in death at the opposite end of the spectrum.

Health connotes not only the absence of manifest disease, but also the absence of non-manifest and undiagnosed disease or impairment. A perfectly healthy person is one totally adjusted to himself and his environment. It is obvious that with health so intangible, measures of health are extremely difficult to devise and we are forced to use indices based on illness, impairments, or even death.

Death Rates

Practically all health studies rely heavily on death rates as a measure of health deficiencies. However, since death is inevitable, it is only premature death which can be considered a measure of the failure of health. The infant death rate has earned the reputation of being the most sensitive index of health. Certainly in the past, when high infant mortality was largely due to insanitary environment, this measure of premature death reflected the general health and sanitation of the community. It still reflects the community response to many of the hazards of pregnancy, delivery, and early post-natal life.

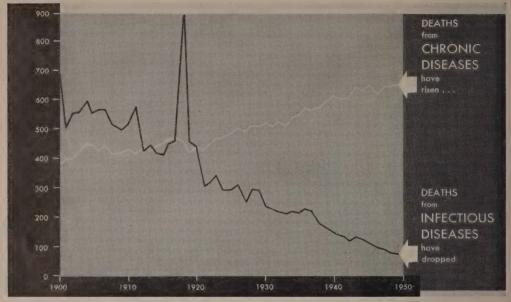
Death rates by age, sex, race, and residence all show differentials which reflect variation in the occurrence of premature death. These data are valuable because of their general availability and continuity. For Massachusetts they go back for more than a hundred years. However, they tell only part of the story. The average length of life (life expectancy) is frequently used as an index, but it is difficult to understand and often misleading.

Morbidity

Most illness, of course, does not result in death. Disability from disease and injuries represents another tremendous impact on society, but one which is hard to measure because of the lack of data.

Our knowledge of communicable diseases is most nearly complete because they are legally reportable to the statutory authorities. Their reporting has been an important aid to health officials in controlling some diseases. In some States a few non-communicable diseases are reportable, for example certain occupational

DEATHS PER 100,000 POPULATION



Basic Data From: National Office of Vital Statistics.

diseases and cancer. Only for certain notifiable diseases do we have current incidence rates for the general population and often these are understated because of incomplete reporting.

Today, chronic illness and disability present our greatest health challenges because of their prevalence and because they reduce the productivity, earning power and living standards, as well as happiness of individuals. Since, however, they are usually obscure in origin, slow in development, and often unrecognized in their early stages, knowledge about them has been obtained slowly and incompletely. We have not yet developed a regular system of securing information on the chronic diseases.

The most extensive attempt to secure data on illness for the general population was the National Health Survey of 1935–36. Confined largely to 2.5 million persons in 83 cities, this survey provided information on the prevalence of disease and impairment, on their distribution by age, sex, income, and occupation, and on the severity of disability in such terms as time lost from work, and days in hospital.

The many other sources of data on sickness are generally limited to special groups of the population and are often defective because information on the charac-

teristics of the population is not available. New methods of obtaining knowledge of the occurrence and severity of chronic disease on a current basis are greatly needed.

Trends in Health Status

Available indices of health, even with their limitations, dramatically show the improvements that have taken place in the prevention of premature death and the incidence of certain diseases.

The greatest gain has been the marked reduction in infectious diseases. The death rate from tuberculosis (per 100,000 population) has dropped in this last half century from 194 to 27. The rate for diphtheria has fallen from 40 to less than one, for influenza and pneumonia from 202 to 34. Typhoid, whooping cough, measles, diarrhea, and other infectious diseases have sharply declined as health problems.

The death rate from all infectious diseases combined dropped from 676 per 100,000 population in 1900 to 79 in 1949, a decrease to about one-tenth of their former toll. This improvement reflects many factors—increase in the standard of living, sanitary control of the environment, widespread immunization, better medical care, and the expansion of local health services. The

specific contribution of each factor is hard to isolate but the over-all progress reflects the work of physicians, public health personnel, and laymen alike.

In many areas of the country, however, the rates for many of these preventable diseases remain relatively high. For example, Southeastern and Southwestern States in general have rates significantly higher than the national average.

Deaths from certain other diseases occur far less frequently than in former years, particularly since the introduction of sulfa drugs and antibiotics. The death rate from appendicitis, has been reduced from 12.9 per 100,000 in 1936 to 2.7 in 1949.

Another measure indicating progress against premature death is the saving of lives of mothers and children. Maternal death rates have declined from 61 per 10,000 live births in 1915 to 9 in 1949. Infant mortality during the same period decreased from 100 per 1,000 live births to 31. Deaths of babies under one month of age, however, have not declined as rapidly.

During the last half century death rates for children and young people have fallen most of all—33 percent. For persons 25-44 years of age the reduction has been 69 percent; for persons 45-64, 38 percent; and for those 65 years and over, only 20 percent. The death rates for men have not decreased as rapidly as those for

women. The death rate for men from 45 to 64 years of age has changed comparatively little over the last 20 years, while the death rate for women of the same age has declined one-third.

The oft-quoted increase in the expectation of life at birth from 47 years in 1900 to 63 in 1949 has resulted particularly from lowered death rates among infants and young persons, and among women.

As the population lives longer there has been a rise in the number of premature deaths from causes which develop over a period of years, and which undoubtedly are affected by the living habits of adults. In contrast to the drop in the death rate from the infectious diseases, the crude rates for chronic diseases such as cancer and the cardiovascular-renal diseases have risen. While much of the increase may be attributed to better diagnosis and to the "aging" of our population, these changes in mortality mean that medicine and public health must shift emphasis, both in practice and in research, from diseases of the young to diseases of the aging.

Present Health Status

The high number of rejectees among young men called for military service in World Wars I and II and the present Korean episode have awakened the Amer-

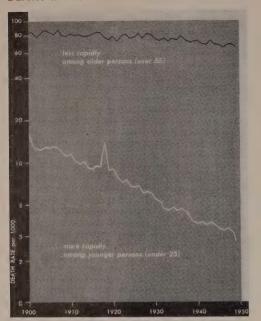
INFANT MORTALITY RATES ARE HIGHEST IN THE SOUTHERN STATES



Infant Mortality Rate by State—1950.

Source: National Office of Vital Statistics.

DEATH RATES HAVE FALLEN AT ALL AGES



Rates Plotted on Logarithmic Scale.
Basic Data From: National Office of Vital Statistics.

ican people to the fact that despite superior medical service and low death rates, Americans are not enjoying as good health as might be expected in this country. A recent study of draftees examined between July 1950 and June 1951 showed that 15 percent had been rejected for medical reasons only. (This figure is not as high as during World War II because standards have been lowered.) Findings of periodic physical examinations of school children also indicate serious deficiencies in the health status of our young people.

The relative importance of the causes of sickness and death depends upon the ways in which we view sickness. Heart disease, cancer, and the cerebral accidents head the list of causes of death. Fatal accidents represent today the fourth leading cause of death. Measured by number of cases, the respiratory diseases are most important. These, particularly the common cold and influenza, make up the bulk of new cases of disabling illness. Accidental injuries are also high on the list. However, if we view illness in terms of the total number of days disabled, heart disease and mental disease head the list.

The young and the old are not equally liable to sickness and death. Morbidity and mortality show wide variations, with high rates at the beginning of life, low rates in the teens, and increasing rates in middle life continuing upward at the older ages.

Illnesses of early life are primarily acute in nature. While acute diseases also make up a great proportion of illness at older ages, the long-term or chronic diseases characterize the sickness pattern in later life.

Greater Need for Certain Groups

Many countries of Western Europe have much lower death rates for certain population groups, especially adult males, than does the corresponding white population of the United States. Improvement in the mortality picture has been greater for women than for men in this country. As already noted some sections of the United States show much higher death rates from communicable diseases than other sections. The same is true of infant mortality.

The Negro population of our country still has a shorter life expectancy than the white population. However, the discrepancy between the two races is narrowing; the gain in life expectancy at birth has been greater for the Negro population in the last 50 years. Tuberculosis, maternal mortality and infant mortality are among the conditions in which the differences between the white and Negro races are still considerable.

All evidence points to a higher incidence and longer duration of illness among people in low-income families than among those with a higher income. This is particularly true for the chronic diseases and impairments. Among the conditions causing a much greater volume of disability among people in low-income families than among people with higher incomes are hernia, variouse veins, and tuberculosis.

All of these differences we know about in general. The information about illness, however, is fragmentary and little of it is current. Studies of the incidence and prevalence of disease and their relationship to medical care and to social and economic conditions can do much to show the areas of need, to suggest ways of attack on these health problems, and to measure the success of our efforts.

WE, THEREFORE, RECOMMEND THAT:

The Federal government develop adequate methods to measure morbidity in the general population, and apply these methods on a periodic basis to assure better, current information on the health status of our people.

HEALTH PERSONNEL

The first 50 years of the present century have rightfully been described as medicine's golden age. However, many of us who take for granted the tremendous victories won by medical science against the deadliest killers of only a generation ago often overlook one crucial fact—all these great advances would have been impossible without our modern system of education for physicians and other health personnel.

Physicians, dentists, nurses, and auxiliary medical workers are the indispensable and irreplaceable core at the center of the provision and distribution of medical care. The machine has replaced brawn and even brain in many an industry and on many a farm, but it has been of only limited assistance in the field of health services. The personal skills of the health worker. accumulated over as long and grueling an educational process as we know in America today, are still the pivotal factors in the promotion of health and the prevention of disease. There is no substitute for the skilled surgeon, the precise dentist, the trained and resourceful nurse. Good health service is never mechanical; it stems from the educated mind, the warm heart, and the practiced hands of our many health workers.

With the increasing demand by the people for more complete health services, there has arisen an almost equal pressure for more health personnel. Even though some of the health professions have doubled and tripled their ranks in the past few decades, they have failed to keep pace with this surging demand.

The cry for more personnel was sounded at almost every panel and at every public hearing held by this Commission. From the big cities and from the forks of the creek the people asked for more physicians, nurses, dentists, public health personnel, and auxiliary medical workers.

The production of these health workers has been described by a leading medical educator as "America's most essential industry." However, we have come to realize that the growth of this industry is taking place in fits and starts with no over-all plan and only a limited amount of long-range planning.

We see no prospect for a great increase in the number of health workers in the near future. The lengthening of the training period for our health professionals, an indispensable element in raising the quality of medical care, makes this expansion process a slow one. We cannot appropriate today and have more health personnel tomorrow. The planning of a medical school, the building of faculty and facilities, can hardly be completed in less than four years. Thus at least eight years elapse from the beginning of planning until the first students graduate. No matter what is done, we can expect continuing shortages in the next few years and must plan with full knowledge of this situation. It is, therefore, essential that we give greater attention to the most efficient utilization of the existing supply as well as to means of increasing it.

Physicians

The physician is the key to the provision of modern medicine. We found insistent indication of a shortage of physicians.

There are not enough general physicians, and most of those we have are so busy that they cannot give the patient the time and sympathetic care the old family doctor used to give in a home visit. We need more pediatricians to assure children the optimum health protection that is their due. Our mental and tuberculosis hospitals are critically short of staff. Medical schools have many unfilled faculty positions. Physicians are needed to carry on research in many institutions and in many fields. In the expanding fields of public health, industrial medicine, and rehabilitation, physician shortages are holding up scores of dynamic programs. In fact, with the possible exception of surgery, there seems to be no area of specialization in which the supply of physicians meets even the present demand.

On top of these many civilian demands lies the constant pressure to meet military requirements. The present level of mobilization requires more than 13,000 physicians in uniform, as against about 6,500 in 1950.

There are about 212,000 physicians in the United States, including those who have retired. The supply of physicians in the past 30 years has just about kept pace with the population. The increase in military

requirements, however, has meant that there are now fewer civilian physicians in relation to civilian population than before the outbreak of the Korean War, or than in 1940.

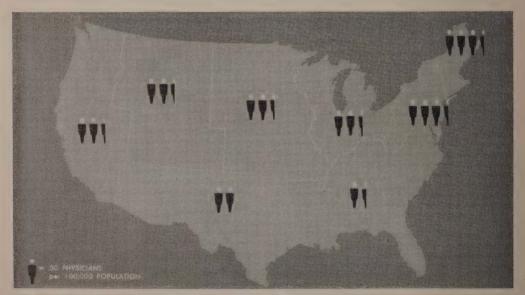
Medical schools have substantially increased their enrollments in the past few years. The number of graduates in 1952 was about 6,100. The class of 1953 will approximate 6,400, and by 1960 the number should approach 7,000. This present trend will just make it possible to maintain the 1949 over-all physician-population ratio for the expected 1960 population. However, if mobilization continues at present levels, the civilian population will even then have relatively fewer physicians than before Korea.

Because physicians make fewer home calls and patients make more office calls than formerly, and also because of technical advances, we have made gains in the availability of physicians' services. But the demand still far outruns supply.

Physician-population ratios vary widely in different parts of the country, with the New England and Central Atlantic States having a fairly high ratio and the Southeastern and Southwestern States a fairly low one. This disparity has been increasing rather than decreasing.

It has been suggested by some that the physician shortage is largely a matter of distribution, that it can be solved, for example, by transplanting physicians from well-doctored Manhattan to under-doctored Mississippi. This proposal overlooks a number of important facts. First, our society is not one in which people can be moved about without regard to their own wishes. Second, even in the areas with a relatively better supply of physicians, numerous vacancies exist. For example, in the New England and Central Atlantic States, the growing fields of public health, industrial medicine, and rehabilitation, as well as mental and tuberculosis hospitals, medical schools, and research organizations are actively seeking physician personnel. Third, we have received impressive evidence of the fact that medical students, upon completion of their training, tend to return to the area and kind of community in which they were brought up. Fourth, it is our carefully weighed conclusion that the growth of prepayment plans and the extension of preventive medicine will increase the demand for phy-

THE NUMBER OF PHYSICIANS IN RELATION TO POPULATION SHOWS SHARP REGIONAL DIFFERENCES



Active Civilian Physicians per 100,000 Population by Region, 1949 (Including Federal Non-Military). Source: Calculated From 1950 American Medical Directory and Bureau of the Census.

sicians to a point higher than the present or predicted total supply, even if an ideal distribution were possible.

Physician Shortages

It is impossible to pinpoint the exact number of physicians we will be short in any future year. At several panel sessions we heard proponents of specific shortage figures advocate their viewpoints with a great air of positiveness. The changing patterns of medical practice, fluctuating demand, and variations in the incidence of disease should temper the positiveness of such estimates.

Although it is impossible to project the indications of present needs into exact future needs, we present several figures which give a gross idea of the size of the problem. These are expressed as of 1960 on the basis of the 171 million population which is expected in this country by that year.

To bring the regions of the Nation with the present lowest ratios of physicians to population up to the current average for the nation would require 22,000 more physicians in 1960 than the predicted supply by that year. This might be considered a minimum estimate of need.

As another estimate one might start with the number of physicians who could give reasonably comprehensive medical care to the whole civilian population; add those necessary to meet the pressing needs for public health services, industrial medicine, mental and tuberculosis staffs, faculties of medical schools and schools of public health; and provide for the requirements of the Armed Forces at the present mobilization levels. Accepting the experience of group practice in providing comprehensive medical care, this method of estimation indicates a need for 30,000 more physicians than the predicted supply in 1960. Such an estimate, it should be noted, would still leave the physician-population ratio for the country as a whole well below that which prevails in some sections of the country today.

To bring all regions of the United States up to the average physician-population ratio of New England and the Central Atlantic States would require an even greater number of physicians—45,000 more than the predicted supply in 1960. However, there is considerable indication that improved organization of medical services could make good medical care possible with fewer physicians than are now available in some of these areas. This highest estimate may be taken to represent a needed supply under present, but not necessarily under improved, methods of organization.

We find, therefore, that the expected supply of physicians in 1960 will fall far short of the number needed to meet the need of the American people for broadened medical services.

Getting More Physicians

We must then set about the task of training more physicians and of securing the best qualified candidates for medical schools. The number of qualified candidates is considerably greater than the number of places in schools. However, it is not always possible for the best qualified candidates to secure a medical education. One crucial element is the expensiveness of the long medical education. The recent G. I. educational program helped many well-qualified young people to gain a medical education who would not otherwise have been able to obtain it, by removing the economic barriers to their education. It demonstrated that financial assistance will increase the number of well-qualified candidates.

Another problem is that of geographic restrictions on medical education. Among the 80 medical schools in the United States, 72 offer the full four years of medical education, 6 offer only the first two years, and 2 are in transition to a four-year program. Forty-one of these are private schools. The other 39 are public but, because they are supported largely by State and local taxes, they tend to restrict enrollment to the residents of their own States. In 35 schools, less than 15 percent of the freshman class comes from out-ofstate. Only 30 of the 80 schools do not, in effect, impose residence limitations on admission of medical students. These residence limitations may adversely affect the quality of students trained. Schools in small States which limit their enrollment in this way often find it difficult to secure a full complement of qualified candidates.

Since one-third of our States do not have four-year medical schools, the geographic barrier to medical education is serious. And since State schools usually are less expensive for the student, this obstacle is often economic as well.

Geographic restrictions on medical education significantly affect the distribution of physicians, since graduates tend to return to their home areas to practice. It is becoming increasingly important for those States which are now short of physicians to recruit, prepare, and help support in medical schools a sufficient number of their native sons to provide adequate medical service. As one hopeful approach to this problem we cite the development of inter-state regional plans for professional education. Several Southeastern States, and likewise several Rocky Mountain States, have entered into arrangements whereby one State assumes the cost for the medical education of a certain number of its residents in a medical school located in another State. By this means a small, or poorer, State can provide public support to medical education and secure a more equitable share of its benefits without the expense of maintaining a medical school.

For many States, providing a higher quality of secondary and college education is another important element in the process of removing barriers to medical education.

The basic barrier to increasing the number of physicians, however, is the limited capacity of our medical schools. This has meant that the proportion of young people who enter medical school has remained almost constant for the past twenty years whereas the proportion who receive a college education has more than quadrupled and the proportion entering engineering has increased six-fold.

Since the end of World War II, a number of medical schools have increased their enrollment appreciably, some of them perhaps too rapidly in view of limited funds which have prevented commensurate faculty and plant expansion. Medical schools have exerted the greatest efforts to reduce overhead and introduce economies into their operation.

However, these commendable efforts pale in comparison with the need. A number of studies conducted over the past few years have found that the medical scheels need from 10 to 40 million dollars in increased operating revenue each year, and a minimum of several hundred million dollars for new construction and capital expansion. Although such private efforts as that of the National Fund for Medical Education and the American Medical Educational Foundation are to be heartily commended, there is serious doubt as to whether they will be able to raise the big sums needed.

The Modern Medical School

The American medical school of today, with its elaborate plant and intricate curriculum, has evolved through a painful process which is not sufficiently understood by some of those who criticize its limited production of physicians. The typical medical school of the 19th century was a small, ill-equipped, proprietary school, with an inadequate faculty and with

tuition collected from students as the main source of support. The end of the 19th century brought a fore-taste of the new education—the development of medical teaching institutions associated with universities. A veritable revolution in medical education occurred in 1910, with the publication of the Flexner Report which led the way to sweeping reforms in medical education.

Increasingly, medical schools seek full-time faculty members who are expert in their subjects. Adequate clinical and hospital facilities are required so that medicine can be learned from the observation of patients as well as from books. To maintain high academic standards medical schools generally have been integrated with the rest of the system of higher education.

These reforms have cost money. Large endowments supported the private medical schools which received no tax support. Between 1910 and 1930, the late John D. Rockefeller and other socially-conscious philanthropists gave some \$200 million in endowments and gifts for the construction and operation costs of the medical schools. Because of this support, neither the medical student nor the university had to provide the full cost of medical education.

Although medical schools continue to receive substantial support from private sources, the greatly increased costs are being met more and more from general university funds and from public appropriations.

Financial Plight of the Medical School

The basic operating expenses of medical schools totalled \$76 million in 1951-52, just about double the cost a decade before. Another \$34 million for medical research came primarily from government agencies, private foundations, and industry.

The cost of the education of an individual medical student totals several times the tuition which he pays. Finding the money to make up the difference is a basic problem of medical education today. Many schools, of course, do not have access to the amount of money which is needed to provide a good medical education—private schools without large endowments and public schools in States which cannot or do not invest adequately in medical education. Hence, at the very time that medical schools are being pressed to train more physicians, they find it harder than ever to obtain the necessary funds.

We are alarmed at the progressively severe financial situation of our medical education system characterized, in various schools, by:

(1) Deterioration of the physical plant, with insufficient funds for needed modernization.

- (2) Inability to pay salaries adequate to attract and hold a sufficient number of high-grade teachers, with the result that many teaching positions are vacant and promising teachers are continually being lost.
- (3) Inability to establish and build teaching programs in areas of recent progress, such as psychiatry, rehabilitation, biophysics; and the social aspects of preventive medicine.
- (4) Inability to expand enrollment to meet the growing need because such expansion without adequate financial means would lead to lower standards of professional education.
- (5) Increasingly high tuition charges and rising cost of living for students which, with inadequate scholarship funds, mean that undertaking the study of medicine is increasingly more difficult for young people with limited financial resources. A similar problem is encountered in residency and other postgraduate training. This situation not only denies educational opportunity to many qualified candidates but, perhaps more important, it endangers the future caliber of the profession by restricting the reservoir from which physicians may come.
- (6) Reliance on research funds to support teaching personnel, so that the primary educational objective is threatened.

We must face the fact that preparation for the medical profession is the most expensive form of education. The high standards of instruction in our medical schools must be maintained because the American people have demanded that the present-day physician undergo the most intensive training in classrooms, laboratories, and hospitals before being allowed to assume responsibility for the life and health of his fellow-men. This wealthy country of ours, which spends close to 5 billion dollars a year on tobacco, is certainly capable of supporting a medical education system second to none. Since health service is a basic right of all our people, the training of personnel to provide this care is a proper object of public concern.

Medical Education a National Problem

The people, as a Nation as well as individuals, benefit from the graduates of both private and State schools. No medical school today performs a purely local function; its graduates practice in many States, and an increasing number are called into Federal service. Medical schools can be located only in certain areas where proper training resources exist and not according to State political areas. The schools must now pay

about three-fourths of the total cost of education. Hence, the Federal government should be prepared to assist both private and State schools whenever necessary.

Efforts to secure funds from industry and other private sources must be continued and expanded. But we believe that these efforts must be supplemented by Federal assistance.

Good education depends on the freedom of each school to establish curriculum and select faculty and students. In any Federal grants to the medical schools, great care must be taken to preserve the traditional independence of the schools. There must be no Federal control over the curriculum or administration of any school or the admission of applicants, except as it may be necessary to maintain minimum standards.

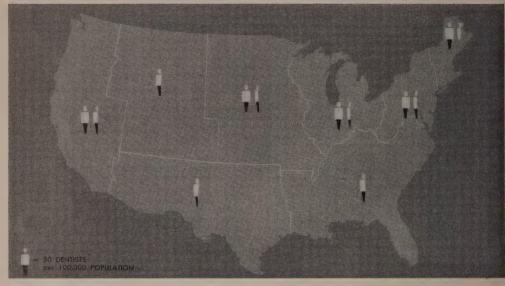
We wish to note here the favorable experience of the medical schools in relation to grants provided through the Public Health Service and other Federal agencies for research, construction, teaching, fellowships, and training. Over the past few years these have amounted to many millions of dollars, yet we heard only praise for the manner in which these grants are administered and we note the absence of any encroachments upon academic freedom in these programs. In fact, a number of medical educators pointedly contrasted this favorable experience with experience of another sort in several of the States. We believe that, should the Federal government by virtue of supporting medical education attempt to interfere with local autonomy, the public, the universities, their medical schools, and the Association of American Medical Colleges would be fully capable of handling such an unlikely situation.

Dentists

We received a vast amount of documentation both at the panels in Washington and in the regional hearings as to the present unmet need for dental services. This present shortage will undoubtedly become greater with more widespread dental health education, which increases the pressure for services. Furthermore, some evidence indicates that inclusion of dental services in prepayment plans, even for children alone, would increase the requirements to a point further in excess of the present supply of dentists.

Dental research leading to the control of dental disease, an urgent need, waits principally upon the development of trained investigators. As an example of the great benefits to be gained by such research, we may cite the recent demonstration that fluoridation will reduce dental decay.

THE NUMBER OF DENTISTS IN RELATION TO POPULATION ALSO SHOWS SHARP REGIONAL DIFFERENCES



Active Civilian Dentists per 100,000 Population by Region, 1949 (Including Federal Non-Military). Source: Compiled From 1950 American Dental Directory and Bureau of the Census.

Almost 11 million persons in the United States are now drinking fluoridated water, and water-fluoridation systems for an additional 17 million persons have been approved. The reduction in need for dental services which these programs bring about may ultimately be considerable, but fluoridation will probably not affect significantly the number of dentists required during the years immediately ahead. It may only serve to offset the steadily increasing demand for dental service from our aging population.

Supply of Dentists

There are about 91,000 dentists in the United States today, both active and retired. However, during the past several decades, the increase in the number of dentists has not kept pace with population growth. Dental educators estimate that their schools would have to graduate a minimum of 400 more dentists per year than now, simply to keep pace with population growth.

Unevenness in distribution of dentists parallels that of physicians. The Southern States have only about half as many dentists in relation to population as the New England and Central Atlantic States. The proportion of Negro dentists to Negro population approximates one-fourth of the proportion of white dentists to white population.

Future shortages in the dental profession are likely to be very great. To bring the regions of the country with the lower dentist-population ratios up to the present national average of one dentist for every 1,750 people would require 17,000 more dentists by 1960 than the predicted supply in that year. To bring all regions up to the present ratios in the New England and Central Atlantic States would require 34,000 more dentists by 1960. Estimates based upon experience with comprehensive dental care indicate that, to give enough service to our people to meet current civilian needs (but without caring for the tremendous backlog of dental disease and defects) and to meet the requirements of dental education and the Federal services, would require many more dentists than the expected supply.

In summary, conservative estimates of the needs for dentists by 1960 indicate a very great shortage.

Dental Schools

Dental schools today graduate some 2,900 dentists a year. This output provides an annual net gain of about 1,500 over deaths—a number which does not begin to meet the need.

To solve the problem of increasing the supply of dentists, a number of approaches are required. These include: (1) Expanding the schools which have adequate facilities and faculties to maximum enrollments; (2) Developing new schools, preferably on a regional, inter-state basis; (3) Removing economic and geographic barriers which stand in the way of the enrollment of many qualified candidates; (4) Increased use of dental hygienists and other auxiliary dental workers.

In many ways the financial condition of our dental education system is even more critical than that of our medical school system. In the face of a tremendously increasing demand on the part of the public for more dentists, dental schools are moving into an expansion phase without the strong financial under-pinning necessary to guarantee soundness of operation and the highest standards of training.

A recently completed study of the financial status of schools of dentistry indicates a minimal need for \$8 million more in annual revenue to finance the operating expenses of this country's 42 dental education institutions. Even more serious is the need for hard money to build physical facilities and equipment. Unlike the medical schools, few schools of dentistry can count on significant sums of money from gifts and endowments. The deans of the dental schools reported this year that they need a minimum of \$50 million for long-post-poned capital expansion.

The general public has little idea of the cost of a dental education. It requires a large investment in special clinical facilities for instruction. Dental schools also take responsibility for the training of auxiliary dental personnel and for graduate training leading to certification in the seven recognized dental specialties.

Meeting Dental Education Costs

Student tuition and fees provide only about onethird of these high costs. In the fiscal year 1949–50, tuition and fees contributed only \$5,400,000 toward the \$16,800,000 total cost of dental education in this country. The major portion of the difference was made up through income from the clinical services of the schools, State and city appropriations, and transfers from general university budgets.

The critical financial situation of the dental schools has handicapped many of their teaching functions. In a recent survey only three schools reported that their teaching staffs were ample. There is an over-all shortage of more than 500 faculty members, most of them sought for full-time positions in the clinical and technical areas. The generally poor salaries for dental teachers and the great variations in salaries among different institutions contribute to the difficulty in filling these positions. This precarious faculty situation is aggravated by the drain resulting from the fact that the Armed Forces take not only essential faculty men but also promising young graduates who might otherwise enter the teaching and research field. In addition, many of the schools cannot afford the research facilities which might induce men and women to go into dental education as a career.

Dental education, like medical education, is very costly to the student, involving the purchase of expensive equipment and supplies as well as high tuition and living expenses. Scholarships are greatly needed in this field.

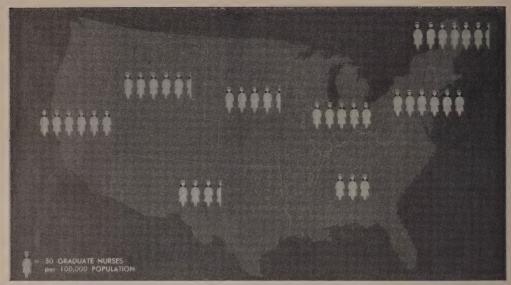
Geographic barriers present the same problems in dental education as in medical education. There are only 42 dental schools, 25 private and 17 public. Since the public schools generally follow the practice of giving preference to students from their own States, the competition for admission to the other schools has become very keen.

Stretching Dental Services

Since it is obvious that training the needed number of dentists would over-extend our present educational resources, we must consider immediate ways of stretching our present supply of dentists. The more effective utilization of dental hygienists (whose responsibility includes cleaning teeth) and of dental assistants (who help the dentist at the chair) can greatly increase the amount of service a dentist can give, and offers the greatest hope for making dental care quickly available to more people.

The number of dentists expected to be practicing in 1960 could probably make good use of 150,000 dental assistants and 20,000 dental hygienists. Only about 55,000 dental assistants and 6,000 dental hygenists are working today, but since the training period for these workers is relatively short, the output could be stepped up appreciably. An active recruitment program could tap a considerable manpower potential, and efforts in this direction should pay great dividends in meeting needs for dental services.

THE NUMBER OF REGISTERED NURSES IN RELATION TO POPULATION SHOWS SIMILAR REGIONAL DIFFERENCES



Active Civilian Graduate Nurses per 100,000 Population by Region, 1951 (Including Federal Non-Military).

Source: Calculated From Data From 1951 Inventory of Nurses, the 1951 Hospital Number of the Journal of the American Medical Association and Bureau of the Census.

Nurses

Nowhere is the American people's increasing demand for high quality health services reflected more dramatically than in the skyrocketing growth of the nursing profession. At the turn of the present century, the 12,000 nurses then in practice were a relatively small component of the medical team. Today, this country's more than 365,000 active nurses are a pivotal, indispensable element in our expanding hospital system, in public health work, in industrial medicine, in the Armed Forces, in the Veterans Administration, and in the home care of thousands of patients.

Still, the demand for nurses continues to outrun the accelerating supply. Despite the fact that today four girls out of 100 enter nursing school, in contrast to only two out of 100 in 1920, the cry is still for more and more. We have received impressive evidence of the present critical shortage of nurses. The major national nursing organizations have completed surveys which show severe deficiencies in almost every city and rural area. Time and again in the public hearings of this Commission, community leaders pleaded for more

nurses to staff their essential health services. Hospital administrators testified as to the large number of wards closed because they cannot obtain nurses to staff the beds. Mental and tuberculosis hospitals need more nurses, public health units are begging for them, industrial health programs suffer for want of them. Nursing schools and nursing education suffer from a lack of qualified teachers.

In 1951 about 27,000 nurses graduated from threeyear programs, and less than 2,000 from four- or fiveyear programs which led to a collegiate degree. The expected number of nurses in 1960 will provide a ratio of nurses to population a little higher than that we have at present.

This expected supply, however, will not meet the increased demands from new hospitals and expanding community health services, nor will it make up present deficiencies. Nurses, like other workers in the health field, are not distributed equitably in relation to population. New England, the Central Atlantic States and the Far West, have proportionately twice as many nurses as the Southern States. While it is difficult to make specific forecasts, the shortage for the country as a whole in 1960 may exceed 50,000.

Increasing the Supply

Hospital-trained diploma nurses constitute the greatest proportion of registered nurses, and everything possible should be done to maintain their number. However, at the present time there are not enough qualified candidates. And it appears that the rate of enrollment will not increase markedly in the near future. Although Government financial assistance to nursing students would increase the number of candidates, it is doubtful that even the increase would be sufficient to meet the demand. Every effort will be required simply to maintain the present number of graduates.

Today the needs are great for nurses with a broad training—usually a four-year-college program—which will equip them for leadership of personnel giving patient care in hospitals and homes. This type of education is also needed for nurses who will carry administrative and teaching responsibilities. Collegiate schools of nursing are now expanding rapidly. As these programs open up, they attract candidates from that group of girls who desire to enter the field of health service but who want a college education. An increase in this group from the present 2,000 graduates a year to about 10,000 seems a feasible goal since the number of first-year students has increased sharply in the past several years. Such an increase would go far toward meeting the need in this field.

Graduates of diploma courses who have the ability and desire to do so should also be given encouragement and aid to complete their general and professional education. Strengthening and extending educational programs for these groups will yield great dividends in improving both care of patients and utilization of other workers.

There are almost 300,000 auxiliary nursing workers in hospitals, and perhaps another 100,000 elsewhere. The 1960 need for these workers is estimated at more than 450,000. About 10,000 of these are practical nurses. The number needed remains to be determined. However, the supply is so far below the present need that it is apparent that recruitment for approved schools of practical nursing should be greatly accelerated.

Most auxiliary workers receive poor training. The development of one-year training courses for practical nurses is heartening. The trend toward short in-service training programs for other auxiliary workers should be strengthened. As rapidly as possible, this type of pesonnel should take over routine housekeeping and bedside tasks, so that graduate nurses can be released to use the special skills in which they have been trained.

Problems of Nursing Education

Increases in the number of nurses and in their responsibilities have occurred so rapidly that nursing education has not been able to keep pace. In most professional fields there has been growing realization of the need for a broad basic education. Nursing education has been slow to adjust its curriculum in this area. During the past few years, there has been a serious effort to concentrate most nursing education in the large hospital and university schools. Today's nursing schools give increasing attention to curriculum planning, to the teaching of biological and social sciences, and to giving an understanding of the physical and mental make-up of the patient. Increasingly, hospital schools of nursing are affiliating with colleges for part or all of their basic academic education.

Experimentation with curriculum would help determine whether the full three-year program is actually needed for the bedside nurse, and to ascertain the proper training for auxiliary nursing workers. Some continuity of curriculum must also be developed so that the girl who enters nursing service through a short training program can go back to school to complete her education. Today hospital training is often considered unacceptable for academic credit, and the candidate who wants to resume training suffers loss of time and duplication of effort.

There is a great need for funds to build up the entire nursing school plant—rehabilitating old structures, constructing badly needed new buildings, providing for adequate staffs and other operating expenses. There is also a great need for money to subsidize the training of nurses, and for scholarships.

Endowment money is almost non-existent in nursing education, and the amounts of public educational funds in this field are relatively small. Thus hospitals bear most of the cost of nurses' training. This should not be necessary. Nursing education, as a responsibility of hospitals, has in many instances represented primarily a device for meeting the immediate need of institutions for nursing service. We believe that nursing, like other professional education, should become a part of the general educational system of the Nation, rather than a charge on hospitals and thus on persons already paying heavy medical bills. This would bring nursing into a position parallel to medicine, with the academic responsibility resting upon an educational institution, and the clinical experience given primarily in the hospital.

Paramedical Workers

As the delivery of high quality medical care has increased in complexity during the past several decades, the concept of the medical team has grown in importance. Today, physicians and nurses serve as the hub of a health services wheel around which revolve several hundred thousand auxiliary medical workers. These paramedical technicians work with and beside physicians—the concept of a team approach is implicit in the word "paramedical."

Medicine, in becoming more specialized and more dependent upon the laboratory for its diagnostic work, has created a need for workers with special training in prescribed fields. In addition, with the broadening of the medical armamentarium to include preventive, psychiatric, and rehabilitative services, a demand has arisen for auxiliary technicians trained in these fields. As a result, more than thirty paramedical specialties have evolved, including such diverse groups as medical laboratory technicians, X-ray technician, dieticians; physical, occupational, and speech therapists; medical record librarians, social workers, clinical psychologists, hospital administrators, and many others. The training required for these fields ranges from one year of training after high school to two years or more of postgraduate education. During the past few years, most of these groups have engaged in commendable efforts to define their functions and set professional standards for training programs leading to certification.

Although these auxiliary specialties are relatively new, there has been an overwhelming demand for their services. This has been accentuated by the current shortage of physicians, dentists, and nurses.

The technician shortage is a serious bottleneck in the provision of medical service. Hospitals in this country recently reported about 18,000 vacant positions for workers in seven of the important paramedical fields, and an expected need for 35,000 additional workers in these fields in another five years. The opening of new hospitals and the increasing demand for more comprehensive medical services will aggravate these deficiencies. Serious shortages of paramedical workers also handicap public health services.

The training of these paramedical workers has become an increasingly important development on the medical horizon. Although some are still trained under the apprenticeship method, a large number are now trained in universities, hospitals, medical centers, and in programs set up by the professional organizations. The improving standard of training in most paramed-

ical fields not only gives increasing assurance of competence and technical reliability but also attracts more applicants to training institutions. Training standards are high in some fields, but in others they are very weak. Much work remains to be done to bring training programs into line with job requirements.

While the several groups of paramedical workers require somewhat different training, there are also basic subjects in which several groups can be trained together. Some universities are already organizing schools of "Auxiliary Medical Services" for the joint recruitment and training of several paramedical groups. This type of program points the way to better training, better use of teaching staffs, and should go a long way in developing workers for the health team.

We wish to emphasize the potentiality of these paramedical workers for rendering more and better health care to the American people. Firm public support should be given to training of paramedical workers, and public educational systems must assume increasing responsibility in these fields.

Recommendations for Health Personnel

To provide health services for the American people requires an array of well-qualified health personnel, adequate in number and trained under the highest possible standards. This situation does not exist today. Shortages in health personnel are demonstrable. Educational facilities are less than adequate and are seriously under-financed. Many qualified candidates are unable to receive training.

The need for funds to train health personnel is serious and urgent, and all sources of funds should be used, including grants from the Federal government. We accept as a principle that any Federal grants should supplement, not replace, State appropriations and private gifts, and should not exceed a designated percentage of a school's total operating budget. Also, the preservation of the administrative autonomy of the schools must be secured. Legislation for Federal grants should spell out assurances of freedom in the selection of students and faculty, and in the determination of the programs, subject only to the requirement that minimum standards be maintained.

With these considerations and principles in mind,

WE, THEREFORE, RECOMMEND THAT: 1

1. To overcome the present financial crisis in our institutions for the education of health personnel, Federal funds be made available:

- a. To schools of medicine, dentistry, nursing, and public health for modernizing and expanding their physical facilities.
- b. To these same schools to make up operating deficits; these operating funds to be used wherever consistent with the highest quality of education, for a gradual, carefully planned expansion of enrollment without discrimination on account of race, creed, or geographical residence.
- c. To encourage the development of new medical, dental, and public health schools, and collegiate schools of nursing in those areas of the country which are now in need of such schools.
- 2. To remove the economic barriers which now restrict the freedom of American youth in gaining entrance to the health professions and which thereby jeopardize the future caliber of the professions:
- a. That Federal funds be made available for scholarships to students who could not otherwise afford to attend school for education and training in the health professions.
- b. That the State governments improve their secondary and collegiate school systems through increasing financial support, so that students desiring to enter the health professions shall not be handicapped by the poor quality of their pre-

professional training. This applies with particular force to rural areas, since we must draw largely upon the rural youth of the country to return after their professional education to fill up the big gaps in health sevices in these areas.

3. To meet the need for additional Negroes in the health professions:

That special programs be formulated to make more and better pre-professional and professional opportunities available for the education and training of Negroes in the health professions. The dual system of education in some parts of this country has made it impossible for many Negroes to receive the high quality secondary and college education needed to qualify them for professional training. The discriminatory bars which start at the secondary school level and run all the way through post-graduate training, internship, and hospital affiliation must be removed wherever they exist.

(Signed) Joseph C. Hinsey

¹ While I can support Federal aid for buildings and facilities and their rehabilitation for education in the health sciences along "Hill-Burton" lines, I have doubts about the advisability of Federal aid in health education as recommended in this report with the possible exception to that in graduate schools of public health.

HEALTH FACILITIES

Variety of Health Facilities

An increasingly wide range of physical facilities is being used today for the rapidly expanding health services which the American people are demanding. Medical care is no longer restricted to the physician's office, the home, and the hospital. Its increasing complexity and reliance on elaborate technical equipment have led to new facilities in industry, in schools, and in the community, in addition to facilities for the treatment of patients and for the production of the tools used by today's physician.

Hospitals ranging from small rural hospitals to the great medical and teaching centers retain a traditional major role in the care of the sick and injured. Medical, dental, and other professional schools have extensive teaching and research facilities. Nursing homes for the care of the convalescent and the chronically ill are becoming more numerous. Diagnostic centers and rehabilitation units are forging into prominence on the medical scene.

As the tools of medicine become more elaborate and expensive, providing them has become a growing problem. As one part of the answer to this, many health departments now provide facilities for preventive services. On another front, industry has pioneered in developing in-plant medical units. In still a third area, many large manufacturing and research organizations have built extensive plants for the production of drugs and appliances.

Hospitals

Hospitals are at the heart of our modern medical system. To the general public, these complex centers dedicated to fighting disease and to preventing needless death symbolize the new role of high quality medical care in the main stream of American life.

In the past several decades, the hospital system has been swept along on a wave of expanding facilities and functions. As a result, hospitals in thousands of communities across the length and breadth of this land are the core of the medical activities in those communities. The modern hospital has developed into the basic institution providing technical facilities for the promotion of health, the diagnosis and treatment of disease, and the rehabilitation of the disabled. More and more, it is becoming responsible for a continuing flow of health services to the community, supplying preventive services in health centers at one end of the line and rehabilitative and home care services at the other end.

Moreover, the hospital has become the most important and most expensive factor in medical education. Medical schools could not exist without teaching hospitals. Nor could the education of nurses and paramedical personnel be carried out without them. There has been increasing realization that the center of all medical educational activities is the teaching hospital. The hospitals also take responsibility for the graduate training of interns and residents. All hospitals which have resident staffs or schools of nursing should be regarded as teaching hospitals, whether or not they are connected with medical schools.

Our people's use of hospital beds has soared in the past generation. In 1930 only 37 percent of all births took place in hospitals, whereas by 1949 this figure had risen to 87 percent. The phenomenal growth of prepayment for hospital care has removed much of the pocketbook terror of hospitals for a considerable portion of the population.

Hospitals are sensitive barometers of the rise and fall of different patterns of disease and treatment. Many diseases which once required long hospitalization now require little or none—pneumonia, for example. The modern onslaught against tuberculosis is already reducing the need for beds for this disease in some areas of the country, although many communities are still far short of tuberculosis facilities. On the other hand, our rapidly aging population is increasing the need all over the country for the care of those with long-term illness.

Alterations in the pattern of medical practice and research discoveries will undoubtedly change the manner in which hospitals are used. Projected programs

for hospital construction and operation must be constantly responsive to these fast changing patterns, fully cognizant of the need to make hospitals the best community instruments for promoting health and treating disease.

Utilization of Hospitals

The provision of hospital care is now one of the first 10 service industries in the country. The 6,600 registered hospitals in this country have about a million and a half beds and admit more than eighteen million patients annually. The number of hospital beds has increased much more rapidly than the population. We now have about 10 beds per thousand people, double the ratio of a generation ago.

It is not generally realized that general hospital beds make up less than half the total; 48 percent of the Nation's beds are in mental hospitals and 6 percent in hospitals for the tuberculous. Almost three-quarters of all hospital beds are operated by local, State, or Federal government, most of these being mental hospital beds

Hospital utilization is high. On an average day, about eight people out of every thousand are in hospi-

tals, half of these in mental hospitals. While we have cut down the average stay of the patient in the non-governmental general hospital to eight days, the patient in the tuberculosis hospital remains an average of eight months and the patient in the mental hospital two years.

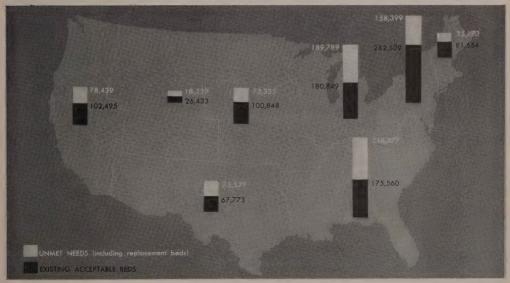
Hospital Needs

In spite of an enormous hospital building program in the past few years, the need for hospital beds in many areas is much greater than the available supply. General hospitals are operating at relatively high occupancy rates. Many people in rural areas are still without needed hospital facilities. Mental and tuberculosis hospitals in many areas are critically over-crowded and have waiting lists for beds. Vital care at the onset of the illness is consequently delayed.

Almost as important as lack of facilities is the need for the replacement and modernization of obsolete hospitals. It is difficult to practice good medicine in many of these run-down structures, and their weary air is a depressant to both patients and staff.

Standards for the minimum needs for hospital beds of the country have been established by the provisions

EXISTING AND NEEDED HOSPITAL BEDS BY REGION JUNE 1952



Existing and Needed General, Mental, Tuberculosis, and Chronic Hospital Beds Needed, According to Hill-Burton Standards, June 1952. Source: U. S. Public Health Service.

of the Hospital Survey and Construction (Hill-Burton)
Act. While these standards provide a useful yardstick
for current estimates of needs, they must be reviewed
continuously because of rapid changes in the incidence
of disease and newer concepts in care and treatment.
For example, further decreases in the incidence of
tuberculosis would free beds for use in the treatment of
other diseases. The growing movement toward nursing homes for chronic illness will affect bed requirements in our mental and general hospitals. Development of organized home care and health and diagnostic
centers outside hospitals will alter the need for hospital
care.

For general hospitals, the standard now used in the Hill-Burton program is one bed for approximately every 220 people, which means that this country requires about 700,000 general hospital beds. In order to achieve this standard, we need nearly 230,000 new general hospital beds, including the number needed to replace those in non-acceptable structures.

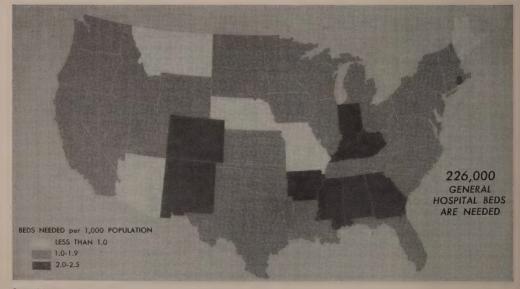
The unmet need is even greater for mental hospital beds. Using the Hill-Burton standard of one for every 200 persons, we need over 330,000 more of these beds. In the case of tuberculosis, using the Hill-Burton standard of 2.5 beds for every death from tuberculosis (based on the average annual number of deaths for the past five years), the Nation needs more than 30,000 additional beds. Moreover, changing patterns of case-finding and care have resulted in waiting lists for admission to tuberculosis hospitals even in some of the areas which are in theory well-supplied. In view of the danger to the community of open cases which should be isolated, this situation indicates that the present standard may be too low.

Rural Hospitals

In general, rural areas have fewer hospital beds in relation to population than do urban areas. Part of this difference is necessary and proper, since in general the more complicated diagnostic procedures, surgical and medical treatment should be carried on in large medical centers where the most highly specialized physicians are concentrated. However, there are differing opinions as to the extent of the need for hospitals in rural areas.

Proponents of a great increase in the number of small hospitals in rural areas argue that these communities need hospitals which have diagnostic and

GENERAL HOSPITAL BEDS ARE NEEDED IN EVERY PART OF THE COUNTRY



General Hospital Beds Needed (Additional and Replacements) per 1,000 Population, According to Hill-Burton Standard, June 1952. Source: U. S. Public Health Service.

SHORTAGES OF MENTAL HOSPITALS ARE EVEN MORE SERIOUS



Mental Hospital Beds needed (Additional and Replacements) per 1,000 Population, According to Hill-Burton Standard, June 1952.

Source: U. S. Public Health Service.

laboratory equipment, as well as facilities to care for obstetrical, accident, medical, and other cases requiring a general physician's care. They also point to the value of these hospitals as they develop into the health foci of whole communities.

Opponents of this trend point out the dangers of medicine and surgery practiced without adequate supervision in these small hospitals. They cite numerous examples of general physicians who do surgical work far beyond their competence in these facilities. They contend that a small hospital where a low quality of medical care is provided may be worse than no hospital at all.

We believe that the potential dangers can be avoided to a large extent by proper affiliation of small hospitals with medical teaching centers and by medical audit—review of the records on the diagnoses and treatment of hospital patients.

We suggest continuing exploration of the best ways in which modern hospital care can be brought to the people of rural areas without encouraging the practice of poor medicine. This and related questions are discussed further in the chapter on organization of health services.

Hospitals as Health and Rehabilitation Centers

The hospital of a century ago was usually an institution which received a patient only when he was too sick to remain on his feet or in the home. Modern medical care has changed this dramatically, so that today a good hospital is in reality a health center which places increasing stress on preventive and restorative services which keep the patient out of a bed. An essential factor in the quality of hospitals is the adequacy of diagnostic facilities. These are often lacking in smaller hospitals.

The out-patient unit of a hospital should be the focus of health services which promote health. Ideally, it should supervise the health of the well child, advise the mother during pregnancy, supply laboratory services for ambulatory patients of the physicians in the community, run health education classes, and perform a myriad of services contributing to the maintenance of health. Unfortunately, out-patient units of many hospitals do not offer such services. Considerable expansion and improvement in quality will be required if they are to fulfill their potentialities.

These promotional health services provided to ambulatory patients should receive much greater stress. The extension of these services would mean a reduction in demand for in-patient beds. Equally important, it means more economical provision of services, it allows the patient to remain in his family and community situation while being treated, and it provides for more efficient utilization of our limited health manpower resources.

The provision of out-patient care has lagged for a number of reasons: resistance to this concept; the absence of community funds to help defray the costs of such care for those who cannot pay their own way; the critical shortage of health personnel necessary to assume the additional responsibilities; and a serious lack of physical facilities.

Many prepayment health plans which have the financial means to encourage the growth of out-patient services make it almost mandatory for a patient to assume a horizontal position before receiving medical care in a hospital. Their policy of payment exclusively for inpatient services has forced excessive use of hospital beds and, in many areas, impeded medical progress. We urge these prepayment plans to reexamine their policies in the light of these facts.

A limited number of hospitals, especially large institutions affiliated with medical centers, have also undertaken to provide restorative services which get the patient out of bed and back to his home and job. It has been proven that a rehabilitation unit in a hospital can speed appreciably the discharge of patients. There is a need for much wider use of these units in major hospitals.

Hospital Financing

The rising costs of both hospital construction and hospital operation are matters of grave concern to the patient, the hospital, and the community.

The Federal program of assistance to the States for hospital construction (Hill-Burton) has helped to finance almost one-third of all non-Federal hospital construction in the past four years. Even with this aid, new construction for short-term patients is just keeping pace with the population increase, while the construction of beds for long-term patients is actually falling behind.

Although the Hill-Burton program has contributed greatly to the improvement of general hospital facilities, especially in rural areas, little attention has been given to the modernization and reconstruction of obsolete hospitals in urban areas. Many of these were built decades ago and their deteriorated condition is a serious hindrance to good patient care and the efficient provision of medical services. Continued segregation of the Negro patients in some parts of the country represents another serious deterrent to the development of good care.

Equally disturbing is the fact that only a small amount of Hill-Burton funds has gone into the building and replacement of badly needed health centers; mental, tuberculosis, and chronic disease hospitals; and rehabilitation facilities. These are glaring weaknesses in the current program.

The entire Federal hospital construction program is now scheduled to expire in 1955, at a time when hospitals will be increasingly hard-pressed to find sufficient funds to meet their current operating expenses, let alone cope with the needed modernization and expansion of their plants.

The growth of prepayment plans has eased the financial situation of non-profit hospitals. However, this lowering of the financial barrier to the patient has resulted in greater hospital utilization and a sharply increased demand for hospital services.

Hospitals are still suffering from inadequate payments for the care of welfare patients and those in the low income groups. Welfare and other public payments for the care of these groups are usually made at fixed rates, often considerably below the actual cost to the hospital for providing the services. These agencies consequently do not carry their share of financial responsibility. The resultant hospital deficit must be made up by other means. To the extent that this results in increased charges to other patients, the sick are subsidizing the sick.

The financial problems of hospitals are closely tied to personnel problems. Hospitals are generally unable to pay salaries sufficient to compete with the salary scales of private industry. If personnel shortages are to be reduced, health workers must be assured a living wage and minimum security benefits.

The training programs which hospitals conduct add to their financial burdens. Currently these programs have developed to the point where they require expensive staffs and elaborate facilities. The teaching of nurses, for example, was once a generally accepted and inexpensive way of securing basic nursing services. Today, the maintenance of a good school of nursing adds a heavy financial burden to a hospital. Similar expenses result from the training of paramedical

workers. We have already recommended that the responsibility for such training should be increasingly borne by publicly supported educational institutions, and not by hospitals which are now struggling to keep their heads above water.

Standards for Hospitals

High standards for hospital operation are essential to assure the delivery of the best modern medical care. There has been a growing recognition of this important fact by both the health professions and the general public.

The establishment of State licensure laws and regulations has done a great deal to improve standards of care and to make it possible for the public to recognize an adequate hospital. The Hospital Survey and Construction Act has given considerable impetus to legislation in this field.

These licensure programs, valuable as they are, have certain limitations. They tend to concentrate on the physical facilities rather than upon the most important element—the quality of medical care provided in a hospital. To this end, to promote and strengthen the voluntary maintenance of the highest standards of medical care and ethics, the medical profession has long accepted the accreditation of hospitals as its responsibility.

The American College of Surgeons initiated the first program of accreditation 35 years ago. This program was unique. In no other country in the world did the medical profession set up standards for hospitals. Their value in safeguarding patients, especially those undergoing surgery, has been incalculable. Later, the American Medical Association started its important program of accrediting teaching hospitals from the standpoint of the quality of the internships and residencies offered.

In December of this year, the American College of Surgeons turned the vital task of accrediting hospitals to the newly formed Joint Commission on Hospital Accreditation, composed of representatives of the American Medical Association, the American Hospital Association, the American College of Physicians, the American College of Surgeons, and the Canadian Medical Asociation. An historic ceremony signalized both a renewed emphasis upon the importance of hospital accreditation and a sharpened sense of the willingness of American medical and hospital leadership to accept additional responsibility for the maintenance of the highest quality of medical practice in our hospitals.

The Place of Nursing Homes

The pattern of long-term illness among our increasing numbers of older people is being reflected in a growing demand for provision of limited medical and nursing care outside of hospitals. Many patients who do not require the intensive and costly medical care of a general hospital must still be given care in such hospitals because there is nowhere else for them to go. Similarly, many elderly people end up in mental hospitals only because their senility is to much of a burden on others. The over-loaded mental hospitals should be devoting their limited services to persons with serious mental disorders; they cannot, and do not, give proper attention to old people with mild senile psychoses.

Although nursing homes for persons requiring limited institutional care have grown rapidly in number and have improved in many areas during recent years, it is clear that there should be more and better such homes. Well-managed nursing homes can more effectively and at less cost than hospitals meet the specialized needs of many chronically ill persons. At the same time, they can remove a considerable and expensive burden from general and mental hospitals.

We note that more official and unofficial agencies are taking an interest in raising the standards of nursing homes. Unfortunately large numbers of them are now sub-standard. While complete information on all homes is not available, many are known to be fire-traps, and many have inadequate nursing staffs or poor arrangements for physicians' care. Nursing homes are for the most part privately operated. Few of them are adequately financed. Payments for patients on public assistance are usually insufficient to pay for adequate care.

In general, bringing nursing homes into close administrative, professional, and geographical affiliation with general or mental hospitals would seem to offer the best prospects for improving the quality of nursing home care. It should be possible to raise standards and cut costs in many areas by replacing small independent nursing homes with larger homes located near hospitals and supervised or operated by those hospitals. A few such homes have already been established. More study of the nursing home situation is urgently needed.

Organized Home Care

Organized programs of home care for chronically ill, disabled, or convalescent persons—removing them from institutions—represent another approach to the problem of health facilities. In the past, we have tended to overemphasize institutional care. Well organized, high quality medical, nursing, social case work, and related services can often accomplish as much for patients in their own homes, and more economically than comparable service in a hospital. In an effort to keep patients out of hospital beds, a few hospitals in the country have already developed such home care programs for the chronically ill, with hospital staff members providing medical and other services. Studies have indicated that many of these patients do much better in their homes. Given adequate professional services, and homes suitable for care, organized home care should offer a desirable alternative to hospitalization for many types of illness.

Tomorrow's Hospitals

This Nation should create a well-equipped system of health facilities adequate to meet every community need. The hospital of tomorrow should be a well-rounded health center from which preventive, diagnostic treatment, rehabilitative, and home-care services radiate to the entire community. It should be the center of the physician's professional life, providing laboratory and X-ray facilities for his use. It should have auditoria for medical and community health organizations, and it should possess a fine medical library. Every physician in the community should have some affiliation with a hospital where he can sit down with his fellow practitioners and both learn from them and teach them.

We believe that the economic resources of this prosperous country are ample to build and support such a hospital system. In the interests of preserving and increasing our national health we can and should be satisfied with nothing less. The cost of providing these facilities throughout the breadth of this land cannot be borne solely by those who are hospitalized, nor can the large scale support necessary be derived entirely from private sources or from the immediate locality itself. Expenditures for these facilities will, in the long-run, represent a net national economy.

WE, THEREFORE, RECOMMEND THAT:

- 1. We plan and develop, as a nation, an adequate system of hospitals and related health facilities to serve all of our people in both urban and rural areas. In developing this program, the principle of Federal grants-in-aid should be maintained for major construction and modernization. Local responsibility for the operation of these hospitals should be continued.
- 2. The Federal hospital survey and construction program be extended and expanded to provide for:
- a. Continued planning, construction, modernization, and repair of short-term general hospital facilities to overcome the present shortages in hospital beds and to meet the needs of an expanding population.
- b. Greatly accelerated planning and construction of health center, mental disease, chronic disease, tuberculosis, rehabilitation, and research facilities.
- c. Particular encouragement to the development of well-rounded medical centers situated in hospitals and including extensive preventive and rehabilitative facilities.
- d. An immediate start on studies necessary as a basis for improvement of hospital functions through appropriation under the existing authorization for this purpose in the Hill-Burton Act.
- 3. Continuing study be made of ways of providing hospital facilities for rural people while preserving the highest standards of medical care.
- 4. Segregation in the use of hospitals be eliminated since it detracts from the efficiency and quality of care.
- 5. Intensive exploration and evaluation be made of the role of chronic disease hospitals, nursing homes, home care programs, and rehabilitation services in meeting the needs of the chronically ill.
- Vigorous public and professional support be sought for the strengthening of hospital licensure and accreditation programs.

ORGANIZATION OF HEALTH SERVICES

The genius for organization, so characteristic of American life in general, is conspicuous in health services by its absence. By organization is meant the process of putting together people and facilities, and utilizing them in the most efficient manner. In industry, the application of this principle has made possible our enormous productivity and our high standard of living. By contrast, the lack of organization that prevails in medical practice is the despair of the industrialist and the labor leader.

This has come about quite naturally. The intimate personal relationship of physician to patient cannot be replaced by production line methods, however much these methods may be used to aid the physician in his work. The intense individualism of the average physician fits him very poorly for the place of a cog in any machine. But the increased complexity of health service, together with the diverse training and disciplines of the people who render that service, makes it increasingly apparent that some order must be achieved. The problem has been intensified by the large number of agencies supplying overlapping services.

To achieve high-quality health services for all Americans requires plans for working toward that goal. We, the American people, are moving toward it, but we are unfortunately wasting many of the resources which we now possess because they are not utilized most efficiently.

Our entire report is concerned with health needs and ways of attaining good health for all the people. In this section, we shall deal primarily with methods of organizing health service so that maximum progress is made with the means that we have.

Present Defects in Organization

As organizational deficiencies in our present health services, one might cite:

- (1) Isolation of the small community and rural hospitals—their patients and their staff members—from the mainstream of fast-moving medical developments in urban medical centers.
- (2) Isolation of the urban medical centers—their staffs and, perhaps even more important, their students—from the everyday practice and problems of medical care.

- (3) Failure to utilize wisely and fully the time of professional health personnel. For example, physicians, dentists, and professionally trained nurses are engaged too often in tasks which could be performed as well or better by less-highly trained personnel. Another example is the wasted time and talent of the young, well-trained physician or surgeon during the years he is establishing himself in practice.
- (4) Inefficiency because of the lack of proper utilization of laboratory, X-ray, and other diagnostic and therapeutic equipment for the benefit of the individual practitioner and his patients.
- (5) Sketchy public health services, which are inadequate in population coverage, do not represent the modern scope of such services, and are isolated from hospital and other community health services.

Fundamentals for Organization of Health Services

One of the basic principles to which this Commission subscribes is that every person should have access to a personal physician. This relationship represents the cornerstone of the proper organization of personal health services. It may be provided through a properly organized group medical center, as well as through an individual physician in his own office. While the value of such a patient-physician relationship is universally accepted, it actually exists for too few people. In reality most of the American people grope their way through a haphazard array of health services without the guidance of a personal physician.

The individual who is interested in promoting his health can take one of several courses. He may seek information from newspaper columns or magazine articles, both good and bad. These are probably the most popular sources of health education. He may purchase vitamin pills, cold medicines, or tonics at the corner drugstore.

It is rarer, and more expensive, for the individual to visit his general physician for a check-up. However, certain groups, such as children and pregnant women, now visit a physician or clinic more often for health maintenance.

The individual who is troubled by minor symptoms of illness may wait for time to take care of the matter.

He often makes his own diagnosis and prescribes his own treatment. Sometimes he asks the pharmacist for advice. Minor complaints under other circumstances may send him to a general physician, to a group clinic, or to a hospital out-patient department. How soon after the onset of symptoms the individual sees a physician varies widely; it depends not only upon his attitudes and his pocketbook but also upon how services are organized in his community.

Major symptoms of illness, especially if they keep the individual from carrying on his job, usually bring him more promptly to a physician. If the individual goes directly to a specialist, he in effect makes his own first diagnosis. He may select the proper specialist by chance; but he may waste valuable time and money with the wrong specialist or in going from one specialist to another.

Hence the confused arrangement of health services presents a serious deterrent to good care. The ideal, of course, is a proper organization of available resources to guarantee that the individual—well or ill—is properly and promptly served. Two elements are essential to such organization: sound health education of the individual so that he has proper information and motivation to initiate action; and a professional person to act as health guide and counselor, to lead the individual through what might otherwise seem a labyrinth of personnel, facilities, and agencies.

Quality of Care, Ethics, and Costs

In the highly personal, yet complex and technical field of health services, quality of care must constantly be sought. It is impossible here to set forth in detail such factors as the qualifications of personnel and criteria for facilities which assure the best care. But it is important to call attention to the fact that organization itself may improve the quality of care or detract from it.

Many practices which detract from the quality of medical care and which have long been considered unethical by the medical profession relate to the matter of fees for services and their division among those involved in caring for a patient. As recently as this year, the American College of Surgeons 1 again called attention to several of these practices in order to denounce them. Among those cited were fee-splitting, i. e., the secret division of a fee between two physicians, usually a referring physician and a surgeon; and ghost

surgery, i. e., deception of a patient as to the identity of the physician who performs an operation. In ghost surgery the patient is led to believe that his family physician performs the operation whereas he actually employs another physician to do the work after the patient is anesthetized. A third unethical practice listed by the American College of Surgeons was the payment of rebates to physicians who refer patients for technical services, e. g., laboratory services or appliances.

The recent past president of the American Medical Association ² condemned the practice of some physicians who increase their fees to an excessive amount when the patient has some coverage by an insurance policy which pays a fixed amount for particular procedures. This practice merely increases the income of the physician without reducing the financial burden on the patient.

The executive medical officer of a large labor health plan ³ has recently reported a widespread situation in which there are "services performed by physicians who know they are not qualified for certain work, but who will attempt almost anything in order to retain the fee. The results are often gruesome." He further reported that there was "unnecessary surgery performed by reasonably competent physicians who know better, but want the money."

Much of the responsibility for such reprehensible conduct rests upon the character of the physicians involved. Professional organizations have taken the leadership in rooting out these practices and have been a most important factor in maintaining medical ethics. Society as a whole, in expressing a greater interest in the organization of health services, will also help to minimize these evils.

Flexibility in Organization Required

The tempo of developments in medicine and health requires flexibility in organization. It must be geared to place in use tomorrow the tested laboratory discoveries of yesterday. Patients on the wards of teaching hospitals often receive the best medical care because of the proximity to research and teaching. The teaching-research center usually applies the latest discoveries in medicine first; organization can hasten their application throughout the medical world.

¹ Bulletin of the American College of Surgeons, vol. 37, no. 3, p. 233, September-October 1952.

² Journal of the American Medical Association, vol. 148, no. 12, p. 1036, March 22, 1952.

³ United Mine Workers Journal, vol. 63, no. 19, p. 5, October 1, 1952.

Organization must also be responsive to fluctuations in the requirements for various types of facilities and personnel. Changes in the pattern of illnesses or in the composition of the population may require different kinds of facilities. Advances in therapy may increase or diminish the need for certain kinds of specialists.

Organization should bring service wherever it is needed by the patient—at home, in the hospital, in the physician's office, or in the clinic. Only a flexible yet well-coordinated organization can provide complete care for the patient.

A single plan will not fit every situation. In fact, organization of health services must be designed for each locality and grow out of local understanding of problems and resources. Local groups and agencies in undertaking improved patterns of health service benefit not only themselves, but may demonstrate for the entire Nation better methods of delivering service.

General Physicians

Physicians, both general and specialist, constitute by far the most important professional element in the delivery of personal health services. One must analyze their work, their responsibilities and the pattern and conditions of their practice today in order to project an organization of services which will make the most of their contributions.

The general physicians of the Nation render and, in spite of the great advances in specialization, will probable continue to provide the greater part of personal health services to the American people. The scope of the general physician's work and his responsibilities differ greatly depending upon his location. The practitioner in the Kentucky hills leads a very different professional life from that of his colleague in the metropolitan area of New York.

However, it is possible to set forth certain generalizations on the responsibilities of general physicians to their patients. These include:

- 1. Responsibility for diagnosis—to ascertain and interpret the facts regarding the individual's health needs for preventive, therapeutic, and rehabilitative care.
- 2. Responsibility for seeing that the individual receives care from the best qualified sources. The general physician himself should undertake those services, but only those services, which are consistent with his own qualifications and the circumstances of each case.
- 3. Responsibility for considering the patient as a person, as a family member, and as a member of the community in which he lives. To do this the general physician must have a deep and broad understanding

of social and emotional factors, as well as the physical components, in illness.

- 4. Responsibility for continuity of care, for knowing the patient in sickness and in health and maintaining supervision throughout. The mobility of our population today, among other factors, makes continuous care more difficult than in former years.
- 5. Responsibility for keeping up his medical education and for maintaining contact with colleagues and medical centers, in order to keep abreast of developments in modern medicine.

Difficulties in the Practice of General Physicians

What are the obstacles, the weaknesses in the system of medical practice today which prevent the fulfillment of these responsibilities? It is often remarked that the general physician suffers from lack of a respected status among his colleagues and the public. One cannot, however, overlook the place of the general physician in the affections and gratitude of his patients where he probably enjoys the highest status of any member of the medical fraternity. His may well be the greatest personal satisfaction of any professional group.

The deficiencies in the care provided by the general physician arise from such factors as the absence of a specified graduate education program, the conditions under which he works, his small financial rewards in relation to those of his specialist colleagues, and his frequent isolation from the mainstream of medical developments.

To become a specialist in any one phase of medicine requires several years of supervised experience beyond the medical school. Yet the general physician, whose interest and responsibility is broader, has no such accepted program to follow. Only recently has this problem attracted serious attention. Although several patterns of training are being suggested and tried, no one pattern has met widespread acceptance.

Long and irregular hours, an average of 60 a week, exhaust even the hardy constitution which the general physician must possess. Especially for the rural practitioner, arranging an annual vacation poses a major problem because someone else must be available to care for his patients' needs. The office and facilities of the general physician usually do not compare favorably with those of the specialist. The principle that every physician should have a hospital affiliation and proper office facilities is violated in the practices of many general physicians. A study in one

large city revealed that only 56 percent of the general physicians had a recognized hospital affiliation.

The income of the general physician falls substantially below that of the specialist. In 1949, the average net income of the general physician in this country was about \$9,300 compared to \$14,000 for the specialist. Even this average differential of almost \$5,000 fails to point up the financial inequities and temptations in our system of individual practice and fee-forservice payment which lead to such abuses as feesplitting. The specialist's fee for a surgical procedure is usually many times greater than that of the general physician who refers the patient. However, the time which the surgeon devotes in the operating room and elsewhere to the care of the patient is generally far less than the number of hours-and often inconvenient hours—which the family physician devotes to the patient and his family. Little wonder that fee-splitting results and that some general physicians undertake procedures for which they are not properly qualified rather than immediately sending the patient to a specialist. Otherwise, the general physician faces the possibility of losing both the fee and the patient.

Isolation of the General Physician

The professional, as well as economic, separation of the general physician from the specialist, and often from the hospital, is detrimental in other ways to the quality of care. A lone physician can no longer render complete care. Many patients require the skills and close collaboration of several specialists as well as a general physician. Informal as well as formal consultation is facilitated if general physicians and specialists are associated in a medical group or if both are affiliated in some way with a nearby hospital.

Such a relationship with his colleagues assures the continuing education of the general physician. Close contact with his associates and with a hospital greatly assist the general physician to keep up-to-date with new developments in medicine.

Today, there is often no real link between the general physician and the specialist. This results in professional isolation and inequities in financial compensation. Both of these factors have serious implications for our future health services.

Specialists

Since the turn of the century rapid advances in research have produced a medical science and technology which is too vast for any one person to grasp and apply. A host of new methods for the diagnosis and treatment of disease has followed upon newly acquired knowledge. The X-ray and the electrocardiography have improved the physician's ability to make an accurate diagnosis; hormone therapy and new surgical techniques have enhanced the physician's power to treat disease successfully. A myriad of such advances has led to the development of specialization in medicine. Today no fewer than 30 specialties and sub-specialties have been differentiated, each with its own unique qualifications and functions.

Not only is there a greater variety of specialists than ever before, but these represent a larger proportion of the total supply of physicians. In 1949, 31 percent of all active physicians were full specialists, as compared to 11 percent in 1923. One can find no convincing evidence of any reversal in this trend toward specialization. A majority of young physicians now limit their practice to a specialty within 10 years after graduation from medical school. In one city, for example, about 82 percent of the 1940 medical graduates limit their practice to a specialty, in contrast to about 40 percent of the physician graduates of 1925.

The geographic distribution of specialists is another important factor. More specialists settle in urban areas than in rural areas; specialists, like other physicians, tend to follow the concentration of population and purchasing power. For instance, the number of specialists totals 72 per 100,000 population in New York State, in contrast to 15 in Mississippi.

Specialization and Quality of Care

Specialization has contributed immeasurably to better health services. In addition to developing the many technical aspects of medical practice, specialists have been leaders in the establishment of standards in medicine and mechanisms for the enforcement of these standards. Specialty groups have stimulated standards for training, for medical practice, and for hospitals.

However, these very efforts to attain better qualifications may have had some undesirable effects—for example, confining the physician in too narrow a field. The presumption of the specialty boards in limiting the practice of the various certified specialists, either expressly or by implication, should be reviewed. The Advisory Board of Medical Specialists should seek a more flexible pattern of specialization and should encourage cooperative relationships between the various

specialty boards. In general, the limitation of the specialist's professional services should be determined by the needs of the community in which he serves as well as by his own professional capabilities.

The Work of Specialists

Like the general physician, the specialist has responsibility for complete application of his knowledge in caring for patients, for calling upon personnel of various types for assistance, for personalizing medical care, and for securing his own continuing education. In addition, he has the responsibility of keeping up with current developments in medical centers and in every day medical practice.

His conditions of work, while entailing greater prestige, shorter hours, higher income, and better facilities than the general physician enjoys, are not always conducive to carrying out his important responsibilities. He may find himself in an environment which depersonalizes medicine and which makes his efforts episodes not related properly to the total, continuing care of the patient. He may find that the full and effective application of his knowledge, which often requires a multitude of tests and other procedures, is too costly for the patient on a fee-for-service basis. For this reason he may hesitate sometimes to order as complete a study as his medical judgment indicates is needed.

To the young physician or surgeon just out of specialty training the prospect of wasted time and talent for a period of years while establishing himself in individual practice looms large. He, like the general physician, faces the necessity of acquiring or having access to an armamentarium of expensive diagnostic and therapeutic equipment which is expensive and not fully utilized in the office of a single physician. The young physician completing his specialty training often faces the world beyond the medical center quite unprepared for the harsh realities of practice. As a consequence, he may choose to remain in the urban medical center, where facilities for practice are at hand, where medical colleagues are near by for quick consultation, and where living conditions for his family are sometimes more attractive.

What should be done to utilize the services of the specialist to better advantage, to extend his skills to rural regions as well as metropolitan centers, and to coordinate his activities with those of other health personnel? The widespread organization of group practice units appears to be a large part of the answer.

Group Practice

The group practice of medicine is a characteristically American response to the need for organization of health services. By group practice is meant the association of physicians of various skills for the purpose of rendering a more complete and balanced health service. In some groups dentists are included.

This system of practice presents an important answer to the problems which are posed by the increasing complexity of medical science and technology. The tremendous increase of medical knowledge, particularly in the specialized fields, has made it impossible for one individual to encompass all of it. Since the patient should receive the benefit of this highly technical knowledge from specialists of all types in addition to general physician care, the system of group practice would seem to provide a practical means of access to them. The economies to be achieved by the pooling of purchasing power, by the proper utilization of laboratory and X-ray equipment, and the better use of paramedical personnel represent a further advantage of group practice.

More than 600 medical groups are now known to be functioning in the United States. More than half the physicians in military service during World War II signified their desire to join groups upon return to civilian life. The movement toward this form of practice is growing fairly rapidly.

Advantages of Group Practice

Group practice not only can be an efficient, economical method of organizing health service but also may provide an invaluable setting for continued improvement in the quality of care. Groups are of many kinds—some limited to referred work from other physicians, others offering total care—but generally they grow out of the needs of the area served. In order to offer comprehensive health service the group should provide both general physician service (which may be given by a physician trained in internal medicine) and the major types of specialty care.

The patient benefits through having his entire health service concentrated in one place. This gives greater unity and continuity to his care, encourages consultation whenever it is needed and minimizes travel. The patient also gets more service per dollar spent through the economy of group practice.

Physicians working together in a group continue the best features of their training period throughout their professional lives—the stimulation to keep up with medical progress through constant appraisal by informed colleagues and ready access to consultations and technical assistance. On the personal side the physician in group practice has greater opportunity to take time off for study and vacation in addition to more stable income throughout his years of practice.

We view with approval the recent formation of groups which render prepaid comprehensive health service. In many of these groups, the physician member may conduct an individual practice in his own office in addition to his work with the group. The combination of private practice for the uninsured and of group practice for the provision of prepaid medical care seems to offer a happy transition mechanism.

Obstacles to Growth of Group Practices

Since group practice appears to improve our increasingly complex health services so greatly, one may well inquire why it has not grown more rapidly. Several reasons are inherent in the current structures and procedures of some groups. Some of the most objectionable practices revolve around the internal financial arrangements. Occasionally a group practice is set up primarily to enrich a central controlling group at the expense of the other physicians who become mere employees and not real participants in the group. This leads to considerable professional dissatisfaction and even eventual dissolution of the group. In addition, some groups have not realized their potential through failure to provide real continuity of care; they have "fragmented" and hence discouraged the patient.

Forces outside of the group also tend to deter its natural development. In many parts of the country, organized medical bodies have been distinctly hostile to group practice. This is particularly true where the group is engaged in any form of prepaid medical care. Such a hostile attitude on the part of organized medicine has made it extremely difficult for some groups to recruit or hold new members. Many forms of professional ostracism, including in some cases denial of membership in the county medical society, have acted as powerful deterrents to young physicians wanting to associate themselves with groups. Strong leadership is an important element in establishing group practice.

Another deterrent to group practice is the difficulty in financing the construction of proper facilities. Once groups are well established they encounter relatively little trouble in obtaining capital for expansion. The initiation of a new group today entails purchasing expensive facilities and employing technical personnel, a considerable financial undertaking. Two of the coun-

try's largest and most rapidly growing group practice prepayment organizations initially received substantial loans from unique private sources interested in supporting demonstrations of better organized medical care.

Group Practice a Step Forward

We believe that group practice offers a desirable method of providing medical services when it is properly organized, administered so as to avoid the exploitation of one physician by another or by a controlling hierarchy, and geared toward practicing the highest quality of medicine. We commend the recently organized American Association of Medical Clinics for its efforts in trying to accomplish these purposes.

It is apparent that when group medicine is practiced in accordance with the highest standards, it provides excellent medical care at the lowest cost to the patient and the community. Moreover, our severe shortage of physicians and auxiliary medical personnel makes group practice even more desirable. We cannot afford the wastage entailed in the partial idleness of the solo practitioner while he is building up his practice. In the group he is able to use his training to the fullest from the very beginning.

The further development of group practice would carry forward several principles to which we subscribe—the principle that the physician should have access to all the resources necessary for the care of the patient, the principle of comprehensive health services, and the principle that the same high quality of care should be available to all people. Group practice establishes a setting in which each physician member may readily obtain consultation and other assistance for his patient. If general physicians comprise the core of the group and if prepayment is used, it offers a means of continuous and complete care for the patient.

Regional Organization of Health Services

Just as physicians in many communities are finding it desirable to associate themselves with one another in groups, so physicians, hospitals, and health departments serving certain regions are exploring ways of assisting one another in the development of better health services. When allied with each other they can more readily extend the benefits of modern medicine to all people in a region, particularly if they are associated with a medical school center.

Regionalization in the health field means bringing together the health resources of an area and coordinating their efforts for the delivery of better service. Really good care can emerge in a community only when there is organized cooperation among all those concerned—physicians, hospitals, health departments, and (if the region includes one) the medical school.

Such patterns of organization are by no means new. Customarily physicians cluster around hospitals and. as noted in the last section, they are now establishing organized groups in order to practice better medicine. Physicians in small hospitals, if practicing near the medical center where they trained, tend to continue their association with the teaching institution by returning for special educational programs and by referring their complicated cases to colleagues in the medical center for study and treatment. In many communities, health departments and hospitals occupy joint housing. sharing facilities and personnel to the advantage of both public health and hospital services. Thus, in some places, physicians, hospitals, medical schools, and health departments have informally initiated cooperative efforts which may be said to represent regionalization in embryo.

Examples of Regionalization

During recent years more formal types of regionalization of services have emerged. Among these the Bingham Associates Plan in New England, the Council of Rochester Regional Hospitals in upstate New York, and several plans centered around medical schools indicate that the pattern of regionalization varies in different parts of the country.

These pilot operations have suggested numerous ways in which regionalization may enhance the activities of individual hospitals and other units of health service. For example:

- (1) Laboratory, X-ray, and other facilities may be organized to serve several hospitals and health departments on a more efficient basis than when they serve only one.
- (2) Joint purchasing of supplies by a group of hospitals may reduce operating costs.
- (3) Continuing post-graduate education through the use of teaching opportunities at smaller hospitals, as well as courses at the medical center, can be organized on a regional basis for physicians, nurses, and paramedical personnel.
- (4) Easy and regular consultation on individual cases between the personnel in rural areas and those in teaching-research centers keeps the latter in touch

with the problems of day-to-day practice and brings the former in step with recent scientific advances.

(5) To include in the training programs for general practice and the various specialties a tour of duty in smaller community and rural hospitals not only improves the training program, but also tends to elevate standards of practice in the smaller communities because of teaching responsibilities.

Next Steps in Regionalization

These examples merely indicate some of the possible functions of regionalization. Many more could be cited. No one pattern would be suitable for the entire country. Each region would have to study its own resources, needs, and traditions of practice in order to project the type of organization most likely to bring a higher quality of health services throughout the region.

Experience with regionalization programs to date clearly justifies continued exploration of such means of improving health service. Private foundations have up to now provided the necessary monetary backing for these programs. Neither payments for health services nor educational funds can—or should—furnish support in this pioneering stage. Greater financial assistance is required to encourage and assist this development to explore additional methods of bringing a higher quality of service more efficiently to more people.

Public Health Departments

"Family doctor" to the community, the modern local health officer devotes his full time to promoting better health for the whole population. With him serves a team of health workers—public health nurses, sanitarians and many more.

The States and localities have defined broadly his several responsibilities for the protection and advancement of community health, so as to give ample scope to official public health activities and permit their realignment from time to time as new problems come into prominence. For example, Massachusetts law, the earliest to delineate the responsibility of public health, states: "The Department (of Public Health) shall take cognizance of the interests of health and life among the citizens of the Commonwealth."

Traditionally, health departments have sought to minimize the most important day-to-day threats to health. Beginning with the control of epidemic disease, they have more recently successfully engaged in programs for the control of tuberculosis and syphilis and for the improvement of maternal and child health. Now they are seeking ways to attack accidents and the chronic diseases—heart disease, cancer, diabetes, and others—which represent the major causes of death in America. Efforts in these new fields have been greatly aided by Federal categorical grants for heart disease and cancer control.

Public health services, like all other health resources, reflect the changing character of health needs. New problems require new techniques and modes of organization. It is as unrealistic to tackle today's health problems with a type of service developed for the problems of 50 years ago, as it would be to base modern traffic regulations on the pre-automobile era.

Health Department Functions

The activities of local health units may be defined under seven major headings: (1) recording and analysis of health data such as births, deaths, and diseases; (2) health education and information; (3) supervision and regulation necessary to assure a healthful environment; (4) provision of direct environmental health services such as insect and rodent control; (5) administration of personal health services essential to fill gaps which would otherwise exist, and for population groups for which community responsibility has been accepted, e. g., the medically needy, certain maternal and child health activities, communicable and chronic disease control where necessary, special diagnostic services, and the like; (6) operation of health facilities, including health centers and, where appropriate, hospitals; and (7) coordination of activities and resources to meet all types of community health needs.

Each local health unit develops within this spectrum of responsibility a pattern of activity which varies from place to place and from time to time, depending upon the problems at hand and the community decision as to what should be done about them. From this responsiveness to local needs and decisions has emerged a great part of the strength of the health department.

As local health units proved their worth, the number of counties so served in the United States grew from 131 in 1920, to 1,734 in 1950. Federal funds since 1935 have greatly stimulated State and local financial participation in public health work. State and local funds increased from \$36 million in 1935, to \$152 million in 1948. During the period 1937–1946, the proportion of Federal funds going into State and local health

services dropped from 37 percent to 27 percent of the total. Thus, Federal aid has stimulated local health work both absolutely and relatively.

In spite of this rapid growth in recent years, local health services still do not reach approximately 30 million people who live in areas without organized units. Also, many health departments serve areas too small either for economical administration or comprehensive service; they cannot afford the kind of organizational framework which will assure adequate service. Fiftynine percent serve areas of less than 50,000 population. For the country as a whole, the average per capita expenditure for preventive local health services was only \$0.96 in 1950. In 12 States, it was less than \$0.50 per capita.

Deficiencies are also revealed by the personnel situation. A 1951 survey by the Public Health Service, in which 44 State and 1,257 local health departments responded, showed vacancies in budgeted positions totaling 3,081, including 1,062 graduate nurse, 443 physician, 155 engineer, 85 health education, and 76 dentist positions. These numbers actually fail to indicate the total deficiencies since in many cases positions either are not established or are abolished when no candidates are in view.

One factor underlying the shortages of public health personnel is the poor salaries paid in this field. In 1952, the median salary for local health officers was about \$8,700, compared to a median net income of \$12,000 for all specialists. Another factor in securing physicians for this field is the restricted scope of activity of public health physicians. A further deterrent is their isolation from medical practice.

Each State also has a health department with such functions as the promulgation and enforcement of health regulations, appraisal of State health problems and evaluation of existing programs, assistance to local health units, administration of hospitals and other institutions, administration of hospital survey and construction programs, specific or general medical care programs, and the operation of diagnostic laboratories.

Health departments thus represent the mechanism by which the benefits of modern public health practice may be brought to all citizens. In assuming this basic health protection for the whole country, the growth of public health practice to meet the challenge of chronic disease and other new problems must likewise be encouraged. Attention should also be given to the incorporation of health departments into patterns of regionalization, particularly in their relationship to hospital services.

Voluntary Health Agencies

The American people have demonstrated their concern with a growing array of specific health problems through their formation and support of numerous voluntary health agencies. These include the National Tuberculosis Association, American Social Hygiene Association, American Heart Association, American Cancer Society, National Foundation for Infantile Paralysis, National Society for Crippled Children and Adults, and many others. They have come into being through the joint efforts of interested professional and lay persons concerned with a particular disease category.

Most of these voluntary health agencies undertake a three-point program: education, research, and service. Not only is public education on the particular disease problem sponsored, but professional education for physicians and other health personnel is supported through cooperative arrangements with professional associations and teaching institutions. Funds are also allocated for research, usually with the advice of a board of scientific advisors. Service projects include financial support of clinics, case-finding, home nursing, and sometimes payment for medical and hospital care.

One of the outstanding contributions of the voluntary health agencies has been to demonstrate the worth of particular health activities. They often pioneer in establishing a community service. Then, having established its value in the minds of the people, they obtain official public support for it and free their resources for new endeavors. For example, the tuberculosis associations successfully promoted public health nursing service in many parts of the country, a service which was ultimately incorporated into local health departments. Thus, the voluntary health agencies have served not only to focus public attention on problems and to stimulate research, but also to establish effective methods of dealing with the individuals affected.

Local, State and National Organizations

In order to accomplish such purposes the voluntary health agencies operate through State and local chapters, as well as a national organization. Each community selects its own leadership, raises funds to be shared with State and national bodies, and within certain national and state policy limits, determines what it shall do. For the most part, close working relationships are maintained with medical societies and health departments, thus effecting a three-way partnership in

developing a program for the control of a particular disease.

They are also working together with increasing effectiveness through the National Health Council and State and community health councils. By means of these councils they can better assess the total health problem and apportion their energies to it with a minimum of duplication.

Besides the specific organizations each devoted to one disease problem, several American philanthropic foundations have contributed significantly to health progress. Among these is the Rockefeller Foundation which, in addition to its international health work, launched the hookworm campaign in Southeastern United States, sponsors medical research and medical education projects, and recently has aided in the demonstration of new patterns of medical care. The Commonwealth Fund has supported studies and demonstrations in hospital service, medical education, and mental health. Nutrition studies have been especially emphasized by the Milbank Foundation. The Kellogg Foundation has contributed particularly to health department development and to health education.

Professional Associations

Another important health resource lies in the various associations of professional health workers. These societies serve to elevate standards of competence through influence on training programs, as well as directly on practicing members of the profession. They also interpret the work of the profession to the public and have become concerned with the ethics of practice. Such associations contribute significantly to the leadership of voluntary health agencies and to the development of governmental health programs.

An outstanding example of such an organization is the American Medical Association. This organization, including in its ranks most of the physicians of the country, publishes the weekly Journal of the American Medical Association through which its members may keep abreast of all widely applicable medical advances. Scientific activities are conducted by a series of councils, including those on Medical Education and Hospitals, Pharmacy and Chemistry, Foods and Nutrition, Industrial Health, Rural Health, Health Education, and Physical Medicine. Exposure of quackery within or outside the medical profession has been another major contribution of the American Medical Association.

Like the physicians, every other major professional group has formed a national membership organization with State and local chapters for the dual purpose of advancing professional interest and serving the public. Among these are the American Dental Association, National League for Nursing, American Public Health Association, American Hospital Association, and many more.

Recommendations

WE, THEREFORE, RECOMMEND THAT:

For general physicians,

- 1. An intensive field study of the general physician's work, conditions of work, education, training, and economic status be made through the cooperative endeavor of such authoritative bodies as the American Medical Association, the Public Health Service, the American Academy of General Practice, the Association of American Medical Colleges, the American College of Surgeons, the American College of Physicians, and the American Public Health Association.
- 2. Educational programs for the undergraduate, graduate, and postgraduate student be planned to provide the general physician with the best possible basic training and with continuous education throughout his professional life; and that hospitals and professional groups explore ways of extending appropriate hospital affiliation to all general physicians.

For specialists,

1. Group practice be further developed as a means of concentrating and coordinating the skills of specialists for the needs of patients.

For group practice,

1. Groups be organized on a basis which favors high standards of practice and maximum partici-

pation, financially as well as professionally, by all member physicians.

- 2. Organized medical bodies review their attitudes toward group practice in a spirit of tolerance.
- 3. Federal loans be made to local organizations desiring to institute prepayment plans associated with group practice, for the purpose of encouraging the establishment of group practice facilities.

For regionalization of health services,

1. Federal funds be made available to State and and local health agencies (hospitals, health departments, medical schools, or other appropriate bodies) for the purpose of encouraging demonstrations on a pilot basis of the better organization of health services through regional coordination.

For health departments,

- 1. Federal grants-in-aid be made available specifically for the purpose of assisting in the establishment and maintenance of local health departments, with salary levels comparable to the incomes of professional health personnel engaged in private work.
- 2. Federal categorical grants to aid the development of chronic disease control and other new aspects of public health be expanded.

For voluntary health agencies,

1. The American public and the health professions continue to support the work of the voluntary health agencies on the frontiers of health progress.

MEDICAL RESEARCH

Perhaps no field of human endeavor offers more in the way of possibilities for human betterment than that of medical research.

During the past half century, medical discoveries have been key stepping stones to fuller and longer lives for the American people. Many of the diseases that claimed their victims with dramatic speed in 1900—typhoid fever, scarlet fever, whooping cough, measles, diphtheria, smallpox, and malaria—have now become much less frequent causes of death. Infant mortality has dropped to one-fifth of its 1900 rate; maternal mortality, even lower. While sole credit for these advances does not belong to medical research, its contributions have been substantial.

In the short time from 1937 to 1949, the death rate has declined 14 percent. Such medical research discoveries as the sulfa drugs and antibiotics have made important contributions to this dramatic decline. Although penicillin was not distributed generally until 1946, it has already cut into the death toll formerly taken by a host of infectious diseases.

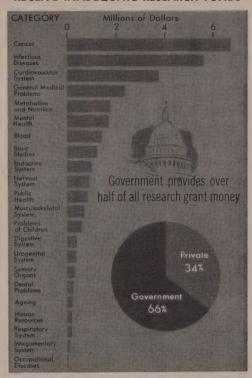
Expenditures for Medical Research

Last year, the Nation spent an estimated \$180 million for medical research. This is almost 10 times what we devoted to such research a decade ago. Of this sum, government provided an estimated 42 percent, industry 33 percent, private philanthropy 14 percent, and hospitals and medical schools 11 percent.

The President's Scientific Research Board found, in a study made five years ago, that the Federal Government had increased its investment in medical research and development from a prewar average of less than \$5 million yearly to more than \$28 million in 1947. In 1952, the Public Health Service had \$18 million for research grants-in-aid to medical schools, universities, hospitals, and clinics; and another \$22 million for fellowships, construction, and other types of grants related to research. These grants, which aid research projects at the local level, are in addition to direct research conducted by the Federal Government in its own laboratories and facilities.

How do these expenditures for medical research stack up against our other national expenditures? Last year's total expenditure of \$180 million amounted to only three-tenths of one percent of the Nation's defense budget. It was less than the amount spent on monuments and tombstones.

MANY IMPORTANT HEALTH PROBLEMS RECEIVE INADEQUATE RESEARCH FUNDS



Medical Research Grants, Government and Private Funds, 1951.
Source: National Research Council.

Last year, one industrial company spent more on business and product research than our entire Nation spent on research into heart and circulatory diseases, which together account for between one-third and onehalf of all the deaths in our country. The Federal government itself spends over 200 times as much on military research as on research into heart disease. The reason we fail to devote a larger slice of our national income to medical research is not skepticism as to its benefits. After sifting the evidence, both at panels in Washington and public hearings in the field, we conclude that the American people are aware of the enormous dividends to be reaped from intensified medical research. They desire to see it extended. The earned income of the American people has been accelerated several billion dollars a year through the rapid decline in the death rate since 1937; this same dramatic decline has brought several hundred million dollars of additional tax revenues to government each succeeding year.

Obstacles to Research

Then why do we not spend more on medical research? What is holding us back?

Medical research cannot be accelerated until more skilled investigators come into the field. The serious shortage of personnel is reflected in the more than 200 vacancies which exist in our medical schools.

Medical research must learn from American industry the cardinal fact that it cannot expand properly until it recruits and holds more of this country's top brains. It cannot do this on a skimpy financial base. If medical research is to compete with industrial research for skilled investigators, it must build up its physical plant and it must offer these workers good salaries and reasonable security. The National Institutes of Health, the research arm of the Public Health Service, did not begin to attract scientists in appreciable numbers until the Congress began to put sizeable annual sums into these Institutes, which are devoted to continuing study of specific diseases. Those who contended just five years ago that the Congress was wasting the people's money by appropriating more money for research because the scientists were not available, have been amazed that the National Institutes now have more than 750 full-time scientists and are recruiting a staff for a new Clinical Center.

Medical research cannot achieve a solid foundation and operating continuity unless it is tied in closely with the mainstream of medical education. The research spirit must permeate the teaching of medicine, and the teaching function, in turn, must broaden the sights of the investigator. Research organizations cut off from the main highways of teaching and practice become sterile. It is the younger minds that infuse new ideas into these units. Research institutions need a steady flow of young people, not only as a source of ideas, but also as a source from which to attract and hold long-term

research workers. The National Institutes of Health, which draw upon the limited research pool of our medical schools, universities, and hospitals, do not as yet train an adequate number of replacements. Other organizations in America today are almost exclusively consumers of research talent; they are making little or no effort to train a new battalion of investigators.

At present, most research salaries are hardly sufficient for a scientist to support a family. No financial inducement is offered to him during the hard years when he is trying to establish himself. The young physician, upon the completion of his residency training and his specialty board qualifications, is usually about 30 years of age. He cannot afford the additional years necessary to qualify him for an academic position and research, so he usually turns to private practice. There is definite need for financial cushioning during this period, probably in the form of long-term stipends to potential researchers who show exceptional promise.

Just as important, research scientists of proven ability must be afforded some tenure rights. Most industries offer their scientists job security and continuous support while they are pursuing difficult leads, but many medical investigators are forced to jump from project to project without any secure under-pinning.

Target vs. Long-Term Research

During the course of its deliberations, the Commission heard much thoughtful discussion about the dangers inherent in grants for so-called "target" medical research as contrasted to basic, fundamental research of a long-term nature. Target projects are directed toward a limited, specific objective with a practical application in mind. They usually have one to three years duration and frequently focus upon an aim which can justify to the public the expenditure of the money.

While many remarkable discoveries have come from these target projects, scientists are increasingly fearful that overconcentration on immediate, specific results may impede the progress of basic research. Basic research cannot be directed or fabricated at will, and it cannot be expressed in project form. This fundamental research has often led to long strides in medicine.

Many of our greatest advances have stemmed from observations quite removed from the research target. Pasteur was studying beer and wine when he hit upon the idea which led him to the bacterial cause of many human diseases. Penicillin originated from a chance laboratory observation; the scientist was not looking for a means of treating infectious diseases. The reser-

voir of basic knowledge, which accumulates best under conditions not circumscribed by the demand for "something practical" at grant-termination time, is seriously threatened by excessive concentration upon projects with applied uses. Investigators who would really like to do fundamental research often channel their work into areas where support can be obtained, neglecting fields in which they may have the most fertile ideas.

The base of medical research must be broadened. Many academic institutions, groups of practicing physicians and other agencies could undoubtedly make significant contributions if given some financial assistance.

A recent study of this thorny problem by a committee of experts recommended the awarding of research grants to permit the support of any worthwhile research idea-fundamental or applied, laboratory or clinical, long- or short-term, spontaneous or stimulated—on the basis that confidence in able researchers justifies long-term support of broad proposals in a manner to insure freedom of thought, inquiry and experimentation. Secondly, the study supported the idea of large block grants to universities or groups of researchers to tackle a whole field of inquiry rather than grants restricted to unrelated, piecemeal studies. Finally, it recommended that substantial funds be made available for general research in order to assure the scientist freedom to pursue his own intellectual curiosity, irrespective of its reference to any defined need or purpose.

Many project grants have adversely affected the financial structure of medical schools because these grants do not include sufficient funds to cover the indirect administrative costs of the projects. Grants for the direct costs of research have resulted in more people and greater amounts of space devoted to research. To service these people and this space costs money—the indirect costs of research. It is estimated that these indirect costs range from 12 to 45 percent of the research grant totals. This has led to the disturbing paradox of increased support for research draining an ever-increasing amount from the limited operating funds of the schools. Bleeding of the schools' fluid funds dilutes medical education both financially and through over-extending the capacity of its faculties. It is a problem urgently requiring corrective action by both governmental and private sponsors of research.

Mental Health Research

We received evidence at all of our field hearings and at several panels in Washington of the appalling lack of research in the field of mental disease. Because the mentally ill occupy half the hospital beds in the United States, the American taxpayer shoulders a tremendous financial burden for the care of victims of mental disease. In the year 1950, Federal and State governments together spent about a billion dollars for hospital care and pensions for the mentally ill. Half the total was spent for veterans' hospitals, pensions, and compensation to veterans with psychiatric and neurological diseases.

Both the extent and cost of serious mental illness are increasing. Patient population in the Nation's mental hospitals rose from 636,000 in 1946 to 698,000 in 1951, an average increase of more than 12,000 patients each year. Tax-supported mental hospital operating expenditures increased from \$260 million in 1946 to more than \$500 million in 1950.

In the face of this enormous expenditure, the Nation spends only \$6 million a year for research in this neglected field. Over the five year period 1946–51, grants for mental health research were less than five percent of grants and contracts for all types of medical research. Our knowledge of mental illness today is in many ways as limited as that of undefined infections in the days when we lumped them all together as "fevers". In fact, the catch-all term "mental disease" includes perhaps as many as 70 disease categories. We are strongly of the opinion that as much money as can be effectively used should be devoted in the coming years to research in the field of mental illness. This should include encouragement of competent investigators to enter this field.

Chronic Illness Research

Chronic illness is a second field which demands much greater probing. While there has been considerable research on specific aspects of these diseases and some on the development of control measures following the detection of disease, little emphasis has been placed upon longitudinal studies of chronic illness. These long-term studies of the occurrence of chronic disease in large segments of the population should lead to preventive measures. We need considerably more information on the natural history of these diseases, the physiological characteristics of individuals who fall prey to them, and the relationship between the individual's mode of life and the occurrence of disease.

Scientists must have increased opportunity to observe environmental factors as they affect health and produce illness. We have lagged behind a number of European countries in relating disease to living conditions, to occupations, and to other factors in the environment. We need community laboratories where we can add the skills of biosocial research to those of the biochemical and biophysical sciences. We must seek basic knowledge of occupational factors in cancer, nutrition in heart disease, family life and personality development in mental health, and of housing in total health.

Administrative Research

A third neglected area is administrative research—investigation of the health services required by the American people and the means of delivering those services. We lack a stockpile of technical information on the most efficient organization of our medical facilities and the most effective utilization of our limited health personnel. This administrative research should receive a much higher priority in our scale of values.

Recommendations

WE, THEREFORE, RECOMMEND THAT:

1. Both private and governmental support for medical research be expanded as rapidly as the money can be effectively used. This money should be allocated to all agencies with promise in this field, not just to medical institutions.

- 2. Financial inducements in the form of fellowships, full-time professorships, higher salaries and a greater degree of tenure be provided so that increased numbers of scientists can be attracted into the field of medical research. This should be carried out with due regard for the interrelationships between research and graduate education.
- 3. A substantial portion of medical research monies be allocated on a long-term basis either to institutions or to individual scientists pursuing basic research.
- 4. Research grants, whether on a project or a long-term basis, carry an amount sufficient to meet a substantial share of the indirect as well as the direct costs of research.
- 5. Greater stimulus be given to research on mental illness and chronic illness, with particular emphasis upon research into the relation between the social conditions of life and disease.
- More emphasis be placed upon administrative research into better and more efficient methods of utilizing our physical plant and our health personnel to deliver more and better health services.

FINANCING PERSONAL HEALTH SERVICES

We have accepted the principle that all persons should have access to comprehensive health services of high quality. We recognize that before such services can be rendered the resources, both in personnel and physical plant, must exist. Methods for improvement in the provision of such resources have been discussed elsewhere in this report. In this chapter the various methods by which personal health services may be financed are presented. We recognize that a financial barrier often prevents the patient from using available health resources.

Magnitude and Nature of the Problem

There is no way to arrive at a precise estimate of the magnitude of the financial problem in the provision of health services. Many persons have incomes which should be sufficient for them to secure adequate medical and hospital protection, but they fail to do so. Sometimes this is due to improvidence; sometimes to ignorance. An educational campaign based on a sense of family responsibility is needed to convince people not only that health is necessary to happiness and welfare, but that it can be purchased. In some cases the properly motivated individual just does not know where to turn for the care which may exist in his community and for which he could pay.

However, the individual often does not obtain health services when the need arises because he simply does not have the money to pay for them. The bald fact that about half of our families receive \$3,000 or less in annual income is proof of this. The number of patients who receive all or part of their medical care through charity or public assistance is very high. However, it is by no means a full measure of the financial problem. There are many more who get inadequate care or no care at all when they need it.

Present Methods of Financing Medical Services

The oldest and the most prevalent device for financing medical care, in spite of the phenomenal growth of insurance in the last decade, is the fee-at-the-time-of-service method. Under this system the patient pays his medical or hospital bills directly, just as he does

his rent and grocery bills. Traditionally the physician's fee varies with the income of the patient; it is frequently nothing at all for the needy. The physician in a sense constitutes himself as the agent to carry out a means test. But now that expensive hospital care has become such an important element in the cost of health service, and with drugs, equipment, and auxiliary services adding to the expense of modern complex care, this traditional system is breaking down. These elaborate services cost money which must be paid by the individual, by charity, by government at some level, or in some other way.

The system of prepayment of physician and hospital bills is rapidly gaining popularity. At the present time over half of our people have some prepaid protection, at least for hospital care. While the scope of services furnished is increasing, it still falls far short of meeting the need. At present such plans cover only 15 percent of private expenditures for medical care. Many desirable services are not provided by most available prepayment plans. A very insistent demand for more comprehensive service is arising.

Prepayment for Comprehensive Health Services

With proper organization, the prepayment principle can be used to provide almost complete protection. We favor this form of financing health services. Existing data show that general hospital costs can be insured quite readily. A number of Blue Cross hospitalization plans provide a fairly adequate answer to the problem of payment of hospital bills.

Comprehensive personal physicians' services, at present not widely available under prepayment plans, can also be provided on this principle, particularly when they are offered within the framework of group practice. There is reason to believe that nursing service and a limited amount of dental care (especially for children) together with the more expensive drugs and appliances, can also come under prepayment.

What is desired is adequate protection against the costs of these items: hospital care; the services of physicians and other health personnel in office and home as well as in the hospital; the more expensive drugs and

appliances, and limited dental care. Dental health is an integral part of health services but, with rare exceptions, maintenance dental care (as distinct from emergency dental services for the relief of pain) is not included in prepayment plans. One of the objectives of comprehensive prepayment plans should be the inclusion of complete dental health services as rapidly as possible. Such plans cannot be expected to cover the costs of prolonged hospitalization for such diseases as tuberculosis and mental disease. These are already an accepted responsibility of government.

Inadequacy of Present Prepayment Plans

We believe that the correctness of the prepayment principle has been demonstrated by the private plans presently in operation, but they have not yet proven their ability to meet fully the need for prepaid personal health services. They do not for the most part offer comprehensive service; generally they limit their benefits to hospital and surgical care. Many of them offer only cash indemnity for medical expense, a method of compensation which often does not cover the full charge. This method also lends itself to a variety of abuses. Available prepayment plans often exclude preexisting conditions needing care and are not available to many population groups. Their control is usually such as to preclude consumer representation in policymaking and they require a flat premium rate irrespective of income.

The extent to which the private prepayment plans meet the needs of the people should be reviewed critically and they should be judged by the extent to which they:

- (1) Provide protection against the total cost of personal health services. This includes preventive services, diagnosis, treatment, and rehabilitation outside the hospital as well as in, but excluding prolonged hospitalization for mental disease, tuberculosis, and other chronic illness.
- (2) Bring prepaid protection to the total gainfully employed population (including workers employed in small groups, the self-employed, and rural people) and their dependents.
- (3) Provide for services on a basis which assures maximum efficiency and economy in cost of operation and in the methods of payment for services; and on a basis which allows for continued development of medical education and residency training programs.
- (4) Recognize their responsibility to the public interest by inclusion of consumer representatives on the

decision-making boards in numbers at least equal to that given representatives of groups providing the services.

Obstacles to Extension of Prepayment Plans

In addition to the inadequacies mentioned above, there are other obstacles to the extension of prepayment. Among the most important is ignorance; a vigorous program of education is needed to indicate to the public the desirability of providing itself with protection of this kind.

The medical profession itself must develop a fuller appreciation of the benefits of prepayment as a means for providing health protection. Medical opposition to plans which offer comprehensive health coverage in some cases has seriously obstructed the development of plans apparently desired by the people.

Legal obstacles also hinder the development of sound prepayment plans in many areas. The removal of bans against consumer-sponsored plans is urgently needed in a number of States. Government could also expedite the development of prepayment for health service by permitting payroll deductions for governmental employees wishing to join available plans.

But the principal obstacle to the development of such plans is financial. It arises partly from unwillingness to pay due to lack of appreciation of the benefits to be received, but more from inability due to lack of money. Ways must be found to finance the premium payments for everyone if prepayment is to become an adequate answer to the problem.

Problems of Low-Income Groups

While we have proposed prepayment as the basic method for meeting the cost of personal health services, it must be recognized that irrespective of how prepayment develops, certain groups in the population do not themselves have the means to purchase such protection. These include families receiving public assistance to meet the costs of food, clothing or shelter—either general public assistance or benefits to which the Federal government contributes, such as those for the blind, the aged, dependent children, and the permanently and totally disabled. Another group consists of those older persons now subsisting largely on Old-Age and Survivors Insurance benefits, which amount to an average of about \$42 monthly for the Nation as a whole.

Obviously, individuals and families who require public assistance or who otherwise subsist on marginal

incomes are not able to provide out of their own resources, even on a prepayment basis, for the cost of their health services. Other resources must be utilized—such funds as general tax revenues for public assistance recipients and Old-Age and Survivors Insurance funds for beneficiaries of that program.

The principle that the same high quality of service should be available to all people applies to those receiving tax-supported care as well as to those who pay for it themselves. In many cities excellent care for public assistance recipients is available at medical teaching institutions and at other facilities. However, sometimes this type of service has not included sufficient regard for the dignity of the patient. The finest opportunity for educating young physicians will materialize when the same standard of care, whether supported by general taxation, prepayment, or otherwise, is maintained for all people. Private hospitals and other charitable institutions have helped to meet the health needs of this group.

In rural areas recipients of public assistance often get second-rate care from the standpoint both of medical science and human dignity. The system of poorly paid "county physicians" still in vogue in many parts of the country is a medical shame.

Besides those receiving public assistance and those subsisting largely on Old-Age and Survivors Insurance benefits, there are also persons who earn such small cash income that they can barely maintain themselves. They have nothing for health services. Ability to purchase health services depends, of course, not only upon income but also upon the costs of care for different conditions. Some people can meet the costs of minor illness but not major illness; some can pay something, but not the full cost even of minor illness; some live on such a marginal basis that they have nothing for health services, even on a flat-rate basis. In any planning for the financing of health services the group which does not receive public assistance for other necessities of life but requires it for health service constitutes the most serious problem.

Governmental Responsibility

These people do not have the means to pay the full cost of prepaid health service. But government has not generally assumed responsibility for any mechanism to assure health services for them. We believe that government must take on a greater measure of responsibility for personal health services for low-income groups, and must continue and expand its sup-

port of the long-term institutional care of those suffering from mental disease, tuberculosis, or other chronic illness. The tremendous costs of this type of service, as well as tradition in this country, make it unlikely that prepayment plans will undertake this care.

For many years Federal law has provided that veterans with service-connected disabilities shall be given medical service. Our merchant seamen have been eligible for more than 150 years for Federally-operated medical care. From time to time dependents of military personnel have had care furnished them by the Federal government. Under treaties with the various Indian tribes, the United States Government is obligated to provide health service. This commitment has not been fully honored.

If all our people are to receive high quality personal health services, government must develop a suitable mechanism, at least for those with low incomes. It must finance it—wholly for some, and probably in part for others. This mechanism should embody the cooperative effort of local, State and Federal government. It should elicit the support of non-governmental agencies, including private hospitals, and of the health professions.

Proposed Methods of Financing Prepayment Plans

Free choice of physician must be assured to the beneficiaries of a prepayment plan. Likewise, the physician must be free to practice in the manner he deems best for the patient and himself under a system of remuneration which is satisfactory to the profession. Since no physician today can have the capabilities needed to furnish comprehensive medical service, some sort of teamwork between general physicians and various specialists is essential. This cooperative effort should remove any incentive to abuse through improper practices. Rendering of unnecessary services and padding of accounts have seriously jeopardized the success of some prepayment plans and should be eliminated.

We also recognize the desirability of providing service at the community level, as near the patient as possible and with a minimum of governmental supervision. Finally the system must really bring medical services of the highest possible quality within the reach of all.

Having accepted the principle of prepayment as the most effective method of providing for health services, we examined several proposals for governmental

assistance in financing them. The more important ones are presented here.

- (1) Direct Federal subsidy of existing prepayment plans. This could take the form of subsidy to the plan itself in order to make it possible for more services to be extended to all persons covered without increasing the premium. Alternatively it could be a subsidy for those people who are unable to pay the full premium in order to make it possible for them to obtain benefits. (This latter method would require a means test.) Federal subsidies would, of course, require the establishment of standards by the Federal agency which disbursed the funds,
- (2) Federal re-insurance of private prepayment plans to enable them to extend their services and still be protected from financial catastrophe. Each participating plan would pay into a Federal insurance agency a certain proportion of the premiums collected from its members. The Government would then guarantee to meet any liability exceeding a certain maximum, in a manner similar to the re-insurance principle as applied to other forms of risk.
- (3) A Federal health insurance corporation. This corporation would itself sell comprehensive health service prepayment policies to groups or individuals on a voluntary basis at a premium rate varying with income. The Federal government might also put into this fund tax monies to cover the premiums for those population groups for which it has already accepted medical care responsibility.
- (4) National health insurance. This proposal has been actively supported and also violently attacked by important elements in our society. Further details of this proposal appear in Volume IV of this report. Under such a plan all gainfully employed persons would be covered by payroll deductions and employer contributions which would go into a Federal fund from which benefits would be paid. Certain groups might also be covered wholly or in part by monies derived from the general tax funds or from other sources. With the funds collected, health services would be made available to those eligible, either through State administration under established standards or by direct Federal operation of the program.

This proposal has received considerable attention and must be recognized as outstanding in the field. Proponents of this plan point to the failure of the existing voluntary prepayment plans to reach precisely those groups which need the protection the most. Opponents object to the compulsory features and to the vastness of the Federal machinery necessary to implement such a plan. The necessity of providing

additional facilities if such a plan is to become operative is recognized by all. But this must be done in any case if adequate medical care is to be made available. The very fact that national health insurance would stimulate, if not require, the provision of additional facilities is cited as a strong argument for its adoption. Unfortunately such a violent controversy has arisen concerning this plan that it is very difficult to get an objective evaluation of its merits or demerits by those most concerned. It must receive further study and consideration as a possible solution to the problem.

(5) Federal grants-in-aid to the States to assist them in the establishment and maintenance of State sponsored and administered prepayment plans. This has the support of precedent in the form of comparable programs in other fields such as hospital construction. public health services, and old age and disability assistance. This Federal aid would be on a matching basis, providing a proportionately larger share of Federal funds to those States with a proportionately larger number of people with meager incomes. Such a Federal-State program could establish by law or regulation specifications which a State would have to meet in order to qualify. These regulations could be quite general or could be very detailed as to groups of persons to be covered, type of services to be rendered, whether premiums should be a flat rate or a percent of income, administrative pattern, and other items.

One Suggested Mechanism

As one mechanism to carry out the last proposal there might be established a Federal-State-Regional Plan (regional, here, means intrastate). The first essential element in such a cooperative Federal-State-Regional Plan would be for the Federal government to declare its intent to assist in assuring the availability of personal health services to all the people.

A regional health authority would be constituted to serve an area in which there was a common medical situation, just as school districts and hospital districts are formed to fulfill common community responsibilities. The boundaries of the region would depend on various factors—geography, population, and existing resources. They might be designated locally or by an appropriate State agency. The local regional health authority would include representatives of all interests but with the consumers of health services in the majority.

This authority might receive funds from various sources: individuals, groups, employers, unions, and farmers' organizations. It might also obtain money from local governmental agencies for the care of the indigents, from the State for the care of those for whom it was responsible, and from the Federal government for the care of those designated as Federal beneficiaries. With the funds, arrangements for comprehensive health services would be made for all eligible people in the area. The patient would be free to choose any physician he desired. However, in order to make really comprehensive care possible, the physician so chosen could associate himself with an appropriate number of other physicians representing various specialties. This association of the physician with his colleagues might be formed solely for the purpose of providing for the prepayment health plan group, each physician continuing to serve his other patients as in the past.

This regional health authority could, of course, function on a local voluntary basis without any connection with State and Federal government.

State and Federal Assistance

However, for maximum support to it, a State health authority would be established with these functions: (1) to assist in the establishment of regional health authorities; (2) to stimulate approved plans for prepaid personal health services submitted by the regional health authorities and to coordinate these into a statewide program; (3) to receive Federal funds for the care of specified beneficiaries and to transmit these to the appropriate regional health authorities; (4) to administer State funds allocated for the purpose of assisting in the provision of personal health services; (5) to designate areas of greatest need within the State and allocate funds accordingly; and (6) to act as the regional authority for those areas of the State which do not establish such an authority.

The Federal government would establish the following responsibilities in a Federal health agency: (1) to set standards for prepayment health service plans which would be used to determine their eligibility to participate in a Federal assistance program; (2) to furnish information, technical guidance, statistical and actuarial consultation; (3) to administer loan funds for assisting in the establishment of prepayment plans which meet the standards; (4) to allocate funds on a matching basis, graduated in proportion to need, to the States for the purchase of prepaid health service under a plan which would make such prepaid health services available to all the people in the State; (5) to arrange, when feasible, for the purchase of prepaid health service for beneficiaries of the Federal government.

This suggestion for a Federal-State-Regional health system would obviously require the cooperation of State governments and the health professions in order to succeed. Because some States in the country, perhaps even those with the greatest immediate need for health service, might delay their participation for various reasons, this proposal would not be a panacea for our problems in the delivery of personal health service. It would, however, recognize the Federal responsibility to help equalize the opportunity to secure health services among various sections of the country. It would also provide a mechanism whereby the Federal government could obtain services for such beneficiaries and use such funds as it chose, e. g., public assistance clients from general revenues. Old Age and Survivors Insurance beneficiaries with Old Age and Survivors Insurance funds, Indians with funds from the Indian service, and military dependents with funds from the Department of Defense.

While this plan appears to meet many requirements for a complete prepaid health service, we do not propose that it be immediately adopted for the country on a national scale. We suggest that it be tried on a pilot basis in several regions in order to determine how far it would go toward the solution of the problem.

Recommendations

In order to move toward the goal of comprehensive personal health services for all people in this country, WE, THEREFORE, RECOMMEND THAT: 128

- 1. The principle of prepaid health services be accepted as the most feasible method of financing the costs of medical care.
- 2. The present prepayment plans be expanded to provide as much health service to as many people as they can; be judged by the criteria mentioned earlier in this chapter; and be aided by government through allowing payroll deductions for government employees, removing the restrictions on organization of prepayment plans, and promoting research on health service administration.
- 3. A cooperative Federal-State program be established to assist in the financing of personal health services. Under this program, a single State health authority would be set up in each participating State. Each State would draw up an overall State plan for assisting the development and distribution of personal health service for all persons. It would use public or private agencies and resources, or a combination of them. State plans

would be developed in cooperation with local or regional authorities and would be linked with the planned expansion of health resources so as to provide ultimately more comprehensive, more efficient, and more economical services. State plans would be expected to conform to certain Federal minimum standards and would be submitted to the Federal health agency for approval. Federal funds for the program might be derived from several different sources as recommended below.

- 4. Funds collected through the Old-Age and Survivors Insurance mechanism be utilized to purchase personal health service benefits on a prepayment basis for beneficiaries of that insurance program, under a plan which meets Federal standards and which does not involve a means test.
- 5. Federal grants-in-aid be made from general tax revenues for the purpose of assisting the States in making personal health services available to public assistance recipients. This should be done under a prepayment plan which is established in consultation with a State advisory council, which is approved by a Federal health agency in accordance with Federal standards, and which specifies:
- a. A state-wide program administered by a single State agency, with an advisory council representing the public interest.
- b. Services to all persons who are declared eligible, with no discrimination as to age, race, citizenship, or place or duration of residence, and with no means test at the time care is needed.
- c. As comprehensive personal health services as local resources will permit, with maximum utilization of all available health personnel and facilities.
 - d. Administration on a local or regional basis.
- 6. Federal grants-in-aid be made from general tax revenues for the purpose of assisting the States in making personal health services available to the general population, under a plan meeting the same criteria as above.
- 7. Federal grants-in-aid be made to the States to assist them and local governments in operating facilities for tuberculosis and mental disease and developing similar facilities for other long-term illness. These institutions should be available to all persons in the population without the application of a means test.
- 8. The Federal government continue to meet through use of its own facilities its obligations for providing personal health services to military per-

sonnel, veterans with service-connected disabilities requiring long-term care, and merchant seamen—with no expansion of Federally operated facilities except when needed for the Armed Forces. It should also continue to meet its present commitments to veterans for service-connected disabilities requiring short-term care and to the Indians, through direct operation of health services—until such time as the administration of these services can be transferred to the States and localities in accordance with approved local and State plans which guarantee a proper standard of care.

Throughout its report the Commission has quite thoroughly analyzed the status of our Nation's health, and recorded its findings in a comprehensive, courageous, and forthright manner. This, however, is not true with reference to the majority recommendations regarding the financing of personal health services. The majority recommendations on these matters will not accomplish the objectives of the Commission as stated throughout the report. Those objectives are stated as, "that all persons in the country should have ready access to high quality comprehensive personal health service."

Any legislation which would leave participation in a health or health insurance program to the option of each State, or which would be dependent upon special kinds of organizations of medical personnel, could not possibly accomplish the objective of giving "all persons in the country" ready access to high quality comprehensive personal health services. In fact, such legislation would discriminate against those persons whose States chose for any reason not to participate.

If the basic recommendations in the Financing of Personal Health Services Section of the Commission's Report are to be considered as a means of achieving the objectives set forth throughout the report, then the participation of every State must be assured by Federal statute, or the Federal government must make such health services available in those States which for any reasons do not participate. In the event this cannot be accomplished for any reasons, then the objectives set forth throughout the report and heretofore referred to should be accomplished through a National Health Insurance Act supported by joint employer-employee contributions and tax revenues.

(Signed) A. J. Hayes (Signed) Elizabeth S. Magee (Signed) Walter P. Reuther

To the men, women, and children in rural America, however, I should be untrue if I did not add a sense of urgency and

¹ We are recording herewith certain objections and a dissenting opinion to the Commission's recommendations regarding the financing of personal health services.

²I heartily agree with the Commission's endorsement of (a) the prepayment principle as the only foundation on which we can build and (b) Federal matching grants to States (upon the basis of relative wealth and needs) as the only effective way of insuring medical care for all people.

desperate need for prompt action. Among our rural people we have neither the wealth nor the insurance needed. Every day men, women, and children are dying needlessly for lack of proper medical and health facilities.

And Federal aid to States is justified. The patronage of the farmers in our rural States has helped the wealthier manufacturing States become rich and these richer States will be helped and not hurt by improving the health and education of their farmer patrons in rural States.

I hope that our report will lead more and more people to accept the principle I have so long proclaimed in this connection—namely, that our democracy will never be complete until every person, rich or poor, high or low, urban or rural, white or black, has an equal right to adequate hospital and medical care whenever and wherever he makes the same grim battle against ever-menacing death which sooner or later we must all make. And as for the method by which this equal right

should be achieved we need to use the prepayment mechanism and add these three basic principles:

- (a) The family that can pay its way should do so.
- (b) The family that can partly pay its way should pay this part, Government and philanthropy providing the remainder.
- (c) Whatever family poverty, illness, or misfortune has left honestly incapable of paying anything will nevertheless be helped by Government and philanthropy to an equal chance with the rest of us.

(Signed) Clarence Poe

³I concur in these recommendations only if comprehensive personal health services are developed so as to maintain free choice of health personnel, freedom of type of practice, and a system of remuneration that is mutually satisfactory to the members of the health professions and the consuming public.

(Signed) Joseph C. Hinsey

A DEPARTMENT OF HEALTH AND SECURITY

The United States is almost alone among civilized nations in having no adequate departmental representation of the public interest in health. A generation ago, this might have been justifiable, but today the development and distribution of health services to the people has become one of the Nation's most basic and farreaching activities. It is inextricably tied up with our effort to build in this land a healthy democracy as a beacon to the peoples of the world.

The importance of the health problems of the American people, as made evident in the recommendations of this report as well as in the health functions already being performed by the Federal government, warrants a strengthened organization of the administrative unit which is to carry out the government's responsibilities in this field.

In response to the direct will of the people, the Federal government's role in the stimulation of health services has increased enormously during the past few decades. Development of the Hospital Survey and Construction program, allocation of constantly increasing funds for medical research, guidance of expanding health services for children and mothers, inauguration of new programs for the control of chronic diseases, administration of medical care programs for special groups of the population-all these and many additional functions attest to the growing responsibility for health progress which the Congress has placed upon Federal health agencies. The leadership and competence of these agencies, especially that of the Public Health Service, have contributed immeasurably to the successful carrying out of these tasks.

Our recommendations, if adopted, would add tremendously to this responsibility. We note the great need for expanding the resources for education of health personnel, accelerating and enlarging the hospital construction effort, stimulating improved organization of health services, extending research, and developing arrangements for personal health services for our people. We find that to carry out these proposed new responsibilities as well as discharge its present duties in the health field, the Federal government should unify and strengthen its organization for health administration.

Relationship of Health to Security

In this connection the broadening concept of health and the corresponding enlargement of the scope of health services deserve emphasis. Just as health means more than freedom from disease, so health progress requires more than the services of physicians, dentist, and nurse—important as they are. Health progress depends in large part upon better housing, better nutrition, better education, and related measures which promote the well-being of people.

The close inter-relationship between governmental functions for advancing the general security of our people and those functions directed specifically toward health services naturally gives rise to thought when the question of governmental organization for health is considered. So fundamental is this interrelationship that it indicates the desirability of combining health and security functions in a strengthened organizational structure. Although this report is concerned primarily with health functions, attention is called not only to the need for enhancing governmental organization for health but also to the value of integrating health functions with those devoted to security.

We are fully aware of the controversies which have prevented such a necessary step. Past proposals for a unified health administration have drawn the fire of veterans' organizations and the military, both of which felt their medical care systems would be adversely affected by any such merger.

However, these and other administrative and functional disputes about the role of a department in the health field fade somewhat in significance when viewed in the light of our total task. There are many health functions for such a strengthened organization to exercise immediately and it would seem unwise to include those of the Veterans Administration or the Department of Defense. Much of the delay in setting up a proper organization for health functions has been caused by the zealousness of some of its partisans to give this department a bigger bite than it can possibly chew in its formative years.

Espousal of a stronger Federal structure for health should not be interpreted as an effort to encroach upon the important functions and responsibilities of State and local health authorities. We view with hearty approval the growth of State, city, and county health agencies. These agencies have moved in recent years into potentially much wider areas of health services. This trend will undoubtedly be accelerated in the next several years. The Federal government's role must be one of leadership and guidance, coupled with financial and technical assistance as needed.

Health Functions for the Department

No attempt is made here to spell out in detail a proposed organizational structure. However, certain areas where considerable expansion of functions and scope should take place can be mentioned. If it carries out the recommendations of this report, the new department must move out into larger horizons than any previous Federal health agency. The following list is by no means inclusive:

- (1) Preventive health activities. All the scattered preventive health activities of the Government should be enhanced and unified. Far-reaching plans for major attacks on disease should be drafted and carried out through the present mechanism of grants-in-aid to the States.
- (2) Development of health resources. A vastly expanded hospital agency should measure up to the challenge of stimulating in this country the finest hospital plant in the world. It should be responsible for longrange plans for an integrated, modern hospital and health center system. This new department should make periodic inventories of our supply of health personnel and suggest ways of making up shortages.
- (3) Administration of funds for financing personal health services. The whole matter of financing of medical care, including the disbursement of large-scale governmental funds for health services, would become a function of paramount importance if our recommendations are adopted.
- (4) Studies of organization of health services. Many of the present investigations of problems relating to medical care are done in spurts, with no regard for the need of continuing study and re-evaluation. One of the most neglected areas in medical research today is the field of organization of our total health services. In the same manner in which the Department of Commerce provides essential information to business, this unit should provide information on which to base the most efficient and economical organization of health service. Health service is a big enterprise now—it is high time we developed a sound fund of information on how it can best be organized.

- (5) Administration of funds for research. The present administrative policies of the Public Health Service in this regard are to be commended. Great expansion of this activity is envisaged in this report.
- (6) Special problem areas in the health field. Many of these should receive much greater emphasis in the future. A partial list would include:
- (a) Rehabilitation. This area of activity merits governmental support commensurate with the tremendous new frontiers which are opening in the field.
- (b) Industrial health. This service suffers now by being scattered among a number of agencies; it must be pulled together, expanded, and placed under a central administration.
- (c) Mental disease and mental deficiency. These must be attacked on a far more imaginative scale. Together they affect directly more individuals than any other condition. We need to direct an all-out attack against them.
- (d) Dental disease. The magnitude of unmet needs in dental health justifies special efforts to meet them.
- (e) Chronic illness. Rapidly increasing problems in this field require that we immediately step up our activities to cope with them.

State and Local Health Authorities

Our major recommendations place great emphasis upon the need for broad planning at the State and local level. Much of the vision and imagination needed in drawing up plans for the expansion of both community and personal health services will have to come from the State and local health authorities who are closest to the people.

Our key recommendations are not projected toward the creation of an all-powerful Federal health agency sitting in Washington and issuing a stream of iron-clad directives to health agencies in the field. Quite the contrary. We see a flow of new ideas and plans for the strengthening of our health services coming from the States and localities into the Federal government, which will then determine whether or not these plans meet necessary minimum standards for any available financial assistance, and encourage other States and localities to try out promising new ideas.

An excellent example of this Federal-State relationship lies in the successful administration of the present Hospital Survey and Construction program (Hill-Burton). In our recommendations for grants-in-aid programs for the creation of local health units, for enlarging the scope of public health services, for additional hospital construction, the necessity for combined

Federal, State, and local planning and financing is underlined.

Many State and local health departments will have to be better financed and staffed if they are to carry out these new responsibilities. For the same reasons that we urge an enhanced position for the health services in our Federal government, we also urge a comparable recognition of health services in the States. Despite the increased demand of people in the States and local communities for dynamic programs in the health field, a number of States still relegate their health departments to a restricted role. Today's heightened interest in health services requires State and local health departments equal to the challenge of the new demands.

Recommendation

WE, THEREFORE, RECOMMEND THAT: 123

The Congress establish a Department of Health and Security.

(Signed) Joseph C. Hinsey

² I favor a Federal Department of Health with cabinet status. The Government is already concerned with health in a big way and we are recommending an increase of its activities. Whether or not the new department should include at the start the medical services of the Armed Forces and the Veterans Administration and whether or not Security should be combined with it are matters of detail and organization which could be determined later by congressional action. In my own opinion, however, the health activities are sufficiently great to justify a department devoted solely to them.

(Signed) Evarts A. Graham

^a The dignity, importance, and financial implications of governmental participation in health demand that it be represented by a department with cabinet status.

The question of the inclusion of the various security and educational functions in a department of health is by no means answered. I favor a department of health which does not include these other functions because I feel that there is enough of purely health interest to engage the entire attention of such a department. And furthermore, the personnel and the disciplines required for these various activities are quite dissimilar, and more harmony would be achieved if they operated in separate spheres. The establishment of this department is long overdue and should engage the immediate attention of the Congress.

(Signed) Russel V. Lee

¹ I do not favor this recommendation because I am not well enough informed as to the factors involved. I believe there should be continued study by a group qualified to develop and present a sound recommendation.

SPECIAL ASPECTS OF HEALTH SERVICE

In addition to recommending the general approaches to the total health needs outlined in the sections above, we have noted that several kinds of special health needs deserve attention.

First, the idea of comprehensive health service should be examined in some detail and steps taken to round out our present health services so that they conform more closely to the ideal.

Second, a number of health problems weigh so heavily upon our whole people that well-considered special attacks should be initiated. Those problems include chronic disease, mental disease, accidents, dental disease, and environmental health problems.

Finally, several groups in the population now present particular health problems which will require special attention to bring health services for them up to the goal of a uniformly high quality for all people. These groups include mothers and children, industrial workers, the aging, rural people, migratory workers, military personnel, veterans, and other Federal beneficiaries.

Comprehensive Health Services

To attain health—optimum physical, mental, and social efficiency and well-being—requires more than the cure or alleviation of disease. It requires sound planning in many fields as well as sound health practices and services. Public policies for agriculture, industry, labor, education, and welfare, in fact practically all major social and economic plans have implications for health. Although recognizing this fact, we have concerned ourselves especially with those measures which are adopted primarily to maintain or improve health. These are:

- 1. Promotion of health
- 2. Prevention of disease
- 3. Diagnosis and treatment of disease
- 4. Rehabilitation

While these four major categories of comprehensive health services constitute fairly distinct segments of care, they are not sharply demarcated and in practice they shade into one another. Ideally they should form a continuum. A clear understanding of the component parts is necessary, however, to achieve the essential unity of comprehensive health service.

Promotion of Health

Much of our health progress stems from the remarkable scientific discoveries of the past century and their applications in the prevention and treatment of disease. Our health advances, however, can by no means be ascribed entirely to specific medical procedures. Rather our improved health status reflects in considerable degree improvement in general living conditions. All of those measures aimed at improving the health aspects of the environment in which people live and at improving personal health practices constitute the promotion of health. Better housing, better nutrition, better working conditions, better education will enhance the health of our people just as certainly as will better physicians' care.

The fact that over-crowded and darkened housing leads to the spread of tuberculosis cannot be doubted. Slum clearance and good housing standards have long been recognized as vital elements of protection against several communicable diseases and home accidents. But only recently have we viewed housing as contributing through adequate space, light, warmth, and other factors to the attainment in a positive sense of physical, mental, and social efficiency and well-being. Good housing would, moreover, permit many sick people to be cared for in their own homes rather than in institutions.

Adequate nutrition constitutes another important element in promoting health. The United States has largely solved the problem of sufficient calories for her people. However, numerous significant opportunities still exist for improving health through more attention to the mineral, vitamin, protein, and other specific nutrition requirements, especially of mothers and children; avoidance of obesity; fluoridation of water supplies to decrease dental caries in children substantially; wider use of iodized table salt to prevent goitre; and many other means.

A healthful working environment; safety in the home, work-place and street; facilities and time for recreation; opportunity to acquire security; access to all needed health services; favorable personal health practices—all these play an important role in the promotion of health.

Education for health began with passing out information and more recently has emphasized the motivation of individuals toward better personal health practices. Although a rapidly expanding activity, health education is still far from reaching its potential. It is now extending into the area of community action. Health councils and other local groups concerned with health can stimulate effort for the promotion of the health of the entire community, with well-rounded effort to meet the specific local problems.

WE, THEREFORE, RECOMMEND THAT:

- 1. All measures for the dynamic promotion of health be strengthened through expansion of public health informational and related activities aimed at individual education and action.
- Health councils and other voluntary groups tackle major local health problems as well as national ones.
- 3. Industry give greater consideration to the relation of working conditions to health.
- 4. Federal, State, and local governmental health agencies pay specific attention to the general living conditions affecting health.
- 5. Legislative bodies take note of the impact of housing, nutrition, and other social factors upon health.

Prevention of Disease

The industrial revolution and the development of preventive medicine have profoundly changed the whole pattern of living for mankind. These two phenomena are linked inextricably with one another. The great massing of people in modern cities in our industrial civilization is made possible by the development and application of methods for the prevention of dis-

Preventive medicine has not only curbed the dreadful plagues which formerly devastated whole populations but has actually demonstrated that many of these diseases can be eradicated, nevermore to be a significant human problem. That this has not yet been accomplished, for example in the case of syphilis, tuberculosis, typhoid fever, and diphtheria, is a reflection upon our social capacity to carry out demonstrably successful measures. No other expenditures of dollars for health are so certain to yield results in human welfare as those spent on preventive medicine.

New vistas are now being opened through another aspect of disease prevention, namely the early detection of disease so as to make possible the prevention of disability and premature death. Well known techniques

such as the miniature chest X-ray for detection of tuberculosis and blood test for syphilis are now being paralleled with similar techniques for the detection of diabetes and certain forms of heart disease and cancer. Widespread development and application of these methods with adequate arrangements for follow-up diagnosis and treatment would lead to the prevention of a vast amount of serious illness.

Disease detection and prevention, especially of this new type, requires the earnest cooperative efforts of practicing physicians, public health agencies, and hospitals drawing upon all professional resources to put these measures into effect.

WE, THEREFORE, RECOMMEND THAT:

- 1. Greatly increased expenditures for the prevention of disease be used to speed the eradication of tuberculosis, syphilis, typhoid fever, diphtheria, and other communicable diseases.
- 2. Programs of disease detection be expanded by health departments and other health agencies in cooperation with local medical groups and other health agencies.

Diagnosis and Treatment

The care of the sick, the diagnosis and treatment of disease, is still the most important element of health service. This is true not only in the mind of the public but also with respect to the numbers of people engaged in it and the amount of money expended upon it. Although the promotion of health and the prevention of disease make a greater ultimate impact upon society, the patient and his treatment are still the core of the health problem.

For many hundreds of years all of medicine consisted of the care of the sick person by the individual physician in a pattern which was fairly uniform. Now all this is changing. The last century and particularly the last 50 years have witnessed a beginning revolution in the manner in which medical service is rendered. And even now no one method has emerged as that which will predominate.

The individual physician, practicing medicine in the traditional manner, is still the most prevalent. But to an increasing extent, diagnosis and treatment are being undertaken by various organized groups, of many sizes and operating under diverse plans. The great medical services of the Armed Forces practice group medicine on a gigantic scale. Then too, many different State agencies care for special types of disease such as mental disease and tuberculosis. Most medical schools are affiliated with great medical centers where patients are

treated in large numbers and in a quite different manner from that seen in the individual physician's office. Private groups of many types are springing up all over the country—some for the treatment of just one disease or condition, some to provide consultation service to a large group of independent physicians, some to furnish medical care to a special group of people, and some to provide medical care to a whole community. Other patterns are being tried and new ones will probably appear.

These changes are a direct reflection of changes in the practice of medicine. Diagnosis, once largely an intuitive affair, is becoming a science. New methods are appearing, some of great complexity. Many of these diagnostic methods are entirely beyond the skills of a single physician, however well-trained. For example, team work is necessary if the newer chemical laboratory procedures, bacteriological investigations, and radioactive isotopes are to be made available to all. Similarly, the treatment of disease is undergoing great change. No one man can possess the skills needed to remove a brain tumor, treat diabetic coma, and manage a psychotic patient. This makes inevitably for a division of function among various specialists.

These facts are forcing a realignment in diagnostic and treatment practice. In the first place, the old-time general practitioner cannot cope with the new times. To function properly today, it is necessary for him to have a much more complete education in general medicine, particularly in diagnosis, so that he is able to know when the rest of the "team" must be called in. His responsibilities increase and his dignity, importance, and remuneration should increase. In the second place, group practice, whether undertaken formally by an organized group of partners, or informally as is done by many urban physicians, is growing rapidly in all parts of the country. More and more patients seek treatment in medical centers rather than in the individual physicians's office.

The medical profession itself has taken the lead in many aspects of these changes. Most significant has been the rise of the specialty boards which set up standards for specialization, hold examinations for candidates, and issue certificates. This has formalized on a voluntary basis the whole field of specialization. The specialist, either as a member of a group or not, generally depends for most of his work on referrals from other physicians.

The medical associations, through their various scientific journals and meetings, make a determined attempt to keep their members informed of the newer develop-

ments in diagnosis and treatment. Consequently, the average physician in this country, unless he practices in isolation, may keep abreast of new discoveries to a remarkable degree.

We note the efficiency with which, in general, new discoveries are being brought to patients, and recognize the trend toward the reorganization of medical services, particularly in the development of group practice and regionalization, which the newer techniques seem to accelerate. We believe that additional experimentation in new patterns of practice should be carried out. In general, the diagnosis and treatment of disease are quite well done in this country. The fact that these skills are unavailable to many people constitutes the main problem

Rehabilitation

Until recently the handicapped was truly the forgotten and neglected man. The condition of these unfortunate individuals was deplored but little or nothing was done about them except for an insufficient amount of charity.

Now the pressure to do something about this problem is increasing. The very medical advances which have preserved so many lives have also led to an increasing number of disabled persons. Unless restored to usefulness, these people waste their energies and talents, often require public funds for subsistence, and even require assistance of other people in attending to the daily necessities of life.

Estimates based on the results of surveys conducted in 1949-50 by the Bureau of the Census indicate that 2 million disabled persons in this country could be rehabilitated and placed in employment or in more productive work. Each year an additional 250,000 persons become disabled to the point of needing medical services in order to achieve or improve employability. In 1953, public assistance benefits because of disability will amount to about \$500 million. While loss of economic productivity is clearly important, much disability is so severe that it extends to a point requiring other persons to spend time in attending to the personal needs of the disabled. Thousands of persons in the United States are paralyzed as the result of stroke, poliomyelitis, and other conditions. They occupy hospital and nursing home beds and utilize nursing time which could be released in great part if these patients were rehabilitated to the point of self-care, even though not to employment.

Disability affects children and the elderly as well as those in the most productive years of life. It arises from a wide variety of conditions—blindness, heart disease, injuries, multiple sclerosis, and many more. In addition to the tremendous loss of productivity and other economic costs, the cost in individual and family suffering cannot be neglected.

Rehabilitation is "the restoration of the handicapped to the fullest physical, mental, social, vocational and economic usefulness of which they are capable." It requires a total evaluation of the individual from many standpoints and undertaking a program of treatment aimed at maximum recovery. If it is to be fully effective, the idea of "total care" should pervade all treatment efforts, from the time the patient first consults a physician until every possible thing has been accomplished. Rehabilitation, or its failure, actually begins when the physician first sees the injured person or establishes the diagnosis of an illness.

Hence, primary responsibility rests with the physician who first encounters the disabled person. For greatest accomplishment, there should also be at the disposal of the disabled person, depending upon his particular needs, a wide array of other professional talents—including those of the physical therapist, nurse, occupational therapist, medical social worker, and psychologist. It has been found most effective for those professional persons to function as a team in which the physician and every other member contributes his particular skill to the diagnosis and treatment. The earlier a patient finds his way into the hands of such a group, the greater the likelihood of rehabilitation.

Most general hospitals could offer such services, yet a recent survey of general hospitals disclosed that only 65 out of 1,600 replying had organized rehabilitation services and only 18 allocated specific beds to physical medicine and rehabilitation. There is need also for specialized rehabilitation centers, staffed and equipped to serve individuals with severe disability whose conditions require the most highly trained skills.

However, the greatest effort will not assure vocational recovery unless employment opportunities are available and the patient trained for an appropriate job. A realistic vocational goal should be established early (if feasible) and consistent steps taken toward it.

The major recent impetus to rehabilitation in the United States came from experiences of World War II. Military and civilian manpower needs focused attention on the tremendous wastage involved in our neglect of the disabled. Advances in surgery, physical medicine, and other techniques made possible the physical restoration of many individuals previously considered hopeless.

A highly significant milestone was the passage by Congress in 1943 of a bill which broadened the Federal-State program of vocational rehabilitation. This step expanded the role of the Office of Vocational Rehabilitation and brought rehabilitation into much closer relationship with other health services.

During the 1944–52 period, 466,481 were rehabilitated under the Federal-State program. In 1951 alone, somewhat more than 60,000 Americans were restored to productive occupations—an accomplishment, however, that only begins to meet the challenge of the 250,000 newly disabled each year and the present backlog of 2 million disabled.

Illustrative of the economic returns from rehabilitation is the 1951 experience of 376 West Virginia families who were rehabilitated at a cost of less than the \$225,000 which they were receiving annually in public assistance payments. They are no longer receiving public assistance, and instead are now earning about \$500,000 a year.

WE, THEREFORE, RECOMMEND THAT:

- 1. An increased number of physicians, dentists, nurses, and paramedical personnel be trained in the special techniques of rehabilitation—both through expansion of facilities and through active recruitment of personnel supported by fellowships; and that all health personnel be oriented in the concept of total care of the patient.
- 2. Development of rehabilitation departments in general hospitals wherever feasible, specialized rehabilitation centers to serve the most difficult cases and to undertake training and research, be encouraged through use of Hill-Burton hospital construction funds and other resources.
- 3. The Federal State vocational rehabilitation program be strengthened and expanded through increased Federal appropriations and State matching funds.
- 4. Critical examination be made of present policies in workmen's compensation, disability insurance plans (both governmental and nongovernmental), welfare programs, and employment practices with the intent of strengthening those policies which favor rehabilitation and abandoning those which impede it.

Special Health Problems

While striving for an ideal of comprehensive health services, we must note that some health problems are of such magnitude or of such a unique nature that they require special efforts for their solution. These include several large groups of diseases which affect great numbers of people—chronic disease, mental illness, and dental disease and defects. Also, there are some major problems where personal health services play a lesser role but community action and health education are imperative—environmental health problems and accidents.

One might also single out a long list of individual diseases, for example the many chronic diseases, which merit and are now receiving particular emphasis by professional groups and the American public generally. However, in this brief report only a few of the high spots can be touched.

We, therefore, call attention to the following special health problems as deserving concentrated effort during at least the next several years.

Chronic Illness

Society is increasingly, though still insufficiently, aware that: (1) chronic illness is a tremendous, but by no means a hopeless, problem, (2) much chronic illness can be prevented, (3) its disabling effects can be minimized or avoided in many instances. A fact about chronic disease that is not so well known is that laboratory tests may disclose its presence much earlier than symptoms.

The basic characteristic of chronic disease is, of course, its long duration, often necessitating medical care for months or years. Examples are heart disease, high blood pressure, cancer, rheumatism, tuberculosis, diabetes, blindness, cerebral palsy, poliomyelitis, and multiple sclerosis. Chronic illness affects persons of all ages; over one-half of the chronically ill are under 45 years of age, more than three-fourths are between ages 15 and 64. As a result of medical discoveries of the past few years, many chronic diseases are now largely controllable, e. g., diabetes, pernicious anemia, and syphilis.

Cardiovascular-renal disease and cancer now cause two-thirds of all deaths in the United States. Many chronic diseases, on the other hand, do not take lives directly but cause great disability, both temporary and long-term invalidism, e. g., rheumatism. Altogether it has been estimated that chronic disease results in half to three-quarters of a billion man-days per year lost from productivity. Chronic illness also accounts for public expenditures of about \$1.5 billion a year for medical and hospital services and about \$1.5 billion for cash benefits.

To the individual family, chronic illness often presents an overwhelming financial problem, in fact wiping out family resources and causing dependency on public funds. Although present prepayment plans afford some protection against acute illness, they usually do not cover the hazards of chronic disease.

Neglect in caring for persons suffering from chronic disease can no longer be tolerated on either humanitarian or economic grounds. Vigorous action is needed to put to work what is already known about controlling chronic disease and to acquire new methods of control.

Prevention of Chronic Illness

The long-range approach to chronic disease must be preventive. Yet, probably in no other health field is available knowledge so little applied as in the prevention of chronic disease. At least 17 chronic diseases are largely controllable and 27 are partially controllable by preventive methods now available. These include both measures which avert the occurrence of disease and those which halt or retard the progression of disease into disability or death.

Some chronic diseases and impairments can be entirely avoided. Good obstetrical care will minimize the occurrence of cerebral palsy. Wearing protective goggles on certain jobs will prevent blindness. Avoidance of obesity will substantially reduce the likelihood of diabetes, hypertensive heart disease, and other chronic diseases. Control of known industrial hazards will lower the incidence of cancer.

In the immediate future great reduction of the burden of chronic diseases can be expected from early detection and adequate treatment of them, before they take their toll of health and earning power. The ideal way to achieve this would be for every person to have a thorough annual medical examination. But there are not enough physicians in the United States to give such examinations to 155 million people and also take care of the sick.

There is, however, a practical way to accomplish a large part of this purpose—multiple screening. This means the application of a battery of economical, rapidly applied tests to screen out apparently well persons who probably have a disease from those who probably do not. Those who are found with "positive" tests are referred to physicians for follow-up diagnosis and treatment. The fact that many chronic diseases develop insidiously to the danger point, the fact that the same individual may have several chronic diseases detectable by laboratory tests, the fact that these tests are most economical when applied on a sizeable scale—these facts support the extension of multiple screening, not only in physicians' offices but also in hospitals and health centers.

Facilities and Services for the Chronically III

The last half century has seen a greatly increased effort on the part of voluntary and governmental agencies, both to prevent chronic illness and to give better care to those affected by it.

Yet not only are we failing to make full use of knowledge to prevent chronic illness, but the care of those already chronically ill leaves much to be desired.

General hospitals have gradually had to absorb a large number of the chronically ill without sufficient adjustment of services. Many such patients are still shunted into outmoded "county homes" and inadequately financed nursing homes where poor care is provided. Public assistance agencies, although not adequately staffed or financially supported to administer medical care programs, have provided an ever-increasing amount of care for the chronically sick.

Organized home care programs have been developed in several localities. These can be a means of bringing high quality medical and related services to patients in their own homes, with more economy and at least as good results as comparable services in a hospital. But adequately organized home services are available in relatively few communities and then only to limited segments of the population.

The range of services needed for persons disabled by chronic illness include: adequate diagnostic and medical service in a hospital or out-patient department; adequate medical services at home, including the coordinated services of a physician-led team of health personnel; rehabilitation services in hospitals, at home and in rehabilitation centers; care in nursing homes; selective job placement; sheltered workshops and day care centers; and sheltered domiciliary care.

The service to chronically ill persons should provide the same fidelity and dignity of care now usually accorded the patient with acute illness. Needs of the chronically ill should be met in plans for general medical care, not in isolated programs. There should be close administrative, professional, and geographical ties between a general hospital and all other facilities and services for the chronically ill, including home care services. Services should be organized so that patients can move easily to and from home, hospital, and nursing home.

Medical education has only recently increased its emphasis on the early recognition and treatment of chronic disease. In the past, medical and nursing students saw almost exclusively persons who were ill, mostly people ill enough to be in bed. As the medical schools begin to assume responsibility for the health

of a group of persons—well, acutely ill, and chronically ill—the attitudes of physicians and nurses will better reflect the proper emphasis on chronic illness.

WE, THEREFORE, RECOMMEND THAT:

- 1. A bold attack be made on chronic disease with emphasis on multiple screening to detect disease early, in physicians' offices, hospitals, industry, schools; and health centers, promoted by the agency which has effectively pointed the way in preventing communicable diseases—the health department.
- 2. Diagnostic and rehabilitation facilities and services be improved and extended.
- 3. All communities develop well organized home-care services which will bring to patients in their own homes the specialized care which is now usually available only in hospitals.
- 4. Physicians, nurses, and other health personnel receive better training in the skills and attitudes necessary for the proper care of those suffering from chronic diseases.
- 5. Field (epidemiologic) research into the causes of chronic illness and administrative research into the most economical and effective methods of caring for those with chronic illness be undertaken.

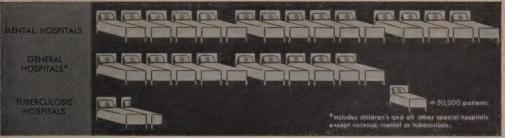
Mental Illness

Half of all patients in hospitals in the United States occupy beds for the mentally ill. As many as half of all patients consulting physicians have either primary or associated emotional disorders. The gross term "mental illness" itself indicates the rudimentary state of our knowledge of this large group of diseases.

Despite increased public attention to the problem, our care of the mentally ill remains seriously inadequate. The need for 330,000 additional beds reflects the vast overcrowding in State hospitals. In some States overcrowding runs as high as 50 percent. Also, many of the existing hospitals are physically sub-standard and deficient in equipment. Mental hygiene clinic service is so underdeveloped that as late as 1950 the ratio of such clinics to population for the country as a whole stood below 1 to 100,000.

Psychiatry is one of the least developed specialties. Two thousand psychiatrists are needed in State hospitals alone. Shortages are widespread among all categories of psychiatric workers: nurses; occupational, physical and recreational therapists; social workers; psychologists; and attendants.

HALF OF ALL PATIENTS IN HOSPITALS ARE IN MENTAL HOSPITALS



Source: Journal of the American Medical Association, Hospital Number 1952.

Legislation in many States is completely outmoded. Admission policies often reflect the old-fashioned view that the purpose of mental hospitals is merely segregation, rather than treatment. Of particular importance is assurance of steady financial support, rather than "famine or feast" depending upon temporary swings of sentiment.

Promotion of Mental Health and Prevention of Mental Disease

The outstanding need in the mental health field is more basic knowledge concerning both the distribution of mental illness in the community and the specific causes of its numerous forms. This knowledge is necessary to develop means for maintaining mental health. In the future development of mental health, the following should be emphasized: prevention of mental illness, promotion of mental health, and treatment and rehabilitation of the mentally ill.

Specific preventive measures currently available are applicable to only a few types of mental illness which represent only a small proportion of the total cases needing hospitalization. Among these are feeble-mindedness due to premature birth or German measles in mothers during pregnancy; the after-effects of meningitis; and paresis due to syphilis. Although tremendous strides are being made in certain respects, as indicated by the reduction of admissions to mental hospitals for paresis, our knowledge of prevention is by no means being fully utilized.

Promotion of mental health requires assuring opportunity for satisfactions in living and for the development of maximum strength in emotional functioning. The parent-child relationship is increasingly recognized as fundamental in emotional development. Steps to assure a wholesome relationship with parents early in life represent probably the most promising approach to mental health. The material bases for satisfactory family life-adequate housing and other elements in our way of living-are a prerequisite. Constructive parental attitudes and understanding of emotional growth are of equal importance. Psychiatrists and their immediate colleagues, psychologists and psychiatric social workers, cannot develop these attitudes and understanding alone. The mental hygiene movement must embrace general physicians, nurses. personnel of law courts, teachers, clergy-in fact all who are in a position to influence people's emotional development, especially the parent-child relationship. Teachers, as the first significant personal contact for the child outside the home, have a particularly significant responsibility. Beyond childhood, too, emotional maturation continues. Increasing strength may be achieved through greater understanding of inter-personal relationships as life proceeds.

Mental health clinics are vitally important as feei from which constructive attitudes may radiate into the community, as well as being places for diagnosis and treatment of those already diseased.

Continuity of Care

A major defect in treatment and rehabilitation of the mentally ill is lack of continuity in the care of the patient. In the first place most communities possess grossly inadequate clinical facilities for early diagnosis. Then, if the disease becomes severe enough to require long-term institutional care, patients are sent to State mental hospitals which are quite isolated both geographically and functionally from the general medical services of the community. Moreover, there is an

almost total lack of follow-up after patients are discharged from hospitalization, a failure again of linkage between local community resources and the long-term mental hospital. Another important element is the fact that most general physicians today need much more training in the care of the mentally ill in order to undertake the guidance of these patients as fully as they should.

Shortage of all categories of personnel for care of the mentally ill, and low standards of pay, especially in public programs, affect both prevention and treatment. The National Institute of Mental Health has appreciably improved this situation in recent years, but the over-all personnel shortage is still about 65 percent.

The problem of the one and one-half million feebleminded in the country has attracted so little attention that our handling of it lags even behind our treatment of the mentally ill. Inadequacies are greatest for the groups in the school-age and working years.

WE, THEREFORE, RECOMMEND THAT:

- 1. Research be given top priority in expenditure of resources for mental illness. Research in the hospital, clinic, and laboratory should be extended. We should also develop epidemiological study of mental disease in the community, long-term studies to unravel the origin of mental disorders, investigation of feeble-mindedness, studies aimed toward differentiating senile patients from patients with other mental disease, and studies to develop better treatment programs for each group.
- 2. The funds now made available to the National Institutes of Health for support of training be materially increased and be used to assist in developing training facilities.
- 3. State mental hospital systems be strengthened and maintained by sufficient appropriations to:
- a. Provide adequate professional staff including psychiatrists, general physicians, nurses, and paramedical personnel.
 - b. Expand and improve the physical plants.
- c. Provide linkage of mental hospitals with general hospitals, mental hygiene clinics, and other units of the health service. Regionalization of mental health services should constitute an integral part of general regionalization programs for all health services.

Dental Disease and Defects

An array of shocking evidence establishes the high priority which dental care deserves among the health needs of the American people. Sufficient dental care either is not available or is not utilized by the American people to a degree even approaching an adequate level.

A survey of school children in one city disclosed that 70 percent of those 12 years of age had one or more permanent teeth that needed to be filled and that by age 15 the proportion was 85 percent. A study by the American Dental Association in 1940 revealed that among young persons 15–24 years of age coming from families with an income of \$3,000 or more, one-sixth required bridges or dentures. Among older people the prevalence of dental disease and defects is well-nigh universal. This includes a vast amount of disease of the gums and other peridental disease as well as defects of the teeth themselves.

Against this evidence of need, it should be noted that less than 40 percent of the American people receive any dental care during the course of a year. These data clearly indicate the large gap between needed dental care and the amount actually provided.

Prevention of Dental Disease

In large part this gap reflects our past widespread acceptance of dental decay and ultimate loss of teeth as inevitable. Until recent times, as a matter of fact, not much was known about the prevention of dental disease and there was little application of this knowledge. Continuation of a resigned attitude toward dental disease, however, is not consistent with our present knowledge.

We now have procedures which, if fully applied, would prevent a great amount of dental disease and correct a large proportion of existing defects.

Fluoridation of communal water supplies is now in effect for 475 communities with a combined population of nearly 11 million. An additional 353 communities with 17 million persons have approved this means of preventing dental decay. Excessive indulgence in refined carbohydrates, as well as deficiency of fluoride in drinking water, may be a significant factor in the poor dental health in this country.

However, even though a wider application of preventive measures will ultimately reduce the need for dental care among our people, the need for dental care will continue at a high rate for many years to come.

Effective use of auxiliary dental personnel would significantly increase the amount of service which dentists could provide. According to a study by the American Dental Association, dentists with one employee were able to see 37 percent more patients than did dentists with no employees, while dentists with two employ-

ees could see 69 percent more patients. Yet, only three-fifths of all dentists employ even one full-time dental assistant or dental hygienist.

WE, THEREFORE, RECOMMEND THAT:

- 1. Dental care be considered an essential component of comprehensive health service, to be made available for children immediately, and for the entire population as rapidly as possible.
- 2. All communities bring the fluoride content of their communal water supplies up to an optimum level for the prevention of dental caries, and that individual preventive dental procedures likewise be promoted.
- 3. More efficient methods of dental practice, including the more general use of dental assistants and dental hygienists, be undertaken.
- 4. Increased research into dental disease be supported.

Environmental Health

During the past century the major health threat to man's environment has arisen through his own despoiling of it. Water in nature is reasonably safe—unless man discharges his own sewage into it. Most natural food, immediately prepared and eaten, is wholesome—trouble arises when man seeks to preserve and process it. Air is clean—until we pollute it with the wastes of urban industrial life. City dwellers have built the slums.

Society has taken important steps to deal with these man-made problems but much remains to be done and new problems come constantly to the fore with our technological advances.

American communities have built good public water supply systems which now serve more than half the population of the country. As a result, the intestinal diseases which once menaced our cities now occur but rarely. However, increased industrial and household use of water is raising a serious question as to the adequacy of total water supply in some areas.

Substantial progress has been made in water and sewerage systems, pasteurization of milk, food processing, and shelter of all kinds. In addition, public and private health organizations have developed laboratories, techniques and staffs of trained personnel which are widely used in controlling environmental hazards. However, the task even with respect to elementary protection is by no means complete.

Seven million homes need to be supplied with running water and water-carriage disposal systems. The backlog of proposed water works construction projects

amounts to \$1.4 billion and of sewerage projects, to \$2.4 billion. One-third of the Nation's dwellings today have basic health defects, being over-crowded, lacking decent toilet facilities, or otherwise showing deficiencies.

Clearly, America needs considerable improvement in basic sanitation to meet a reasonable standard of healthful living. The rural areas particularly have dropped behind in these essentials of modern life: the turning on of the spigot, the flushing of the toilet, the availability of clean food and pasteurized milk.

New Hazards

Meanwhile, the speed of complex environmental changes in this country is tossing us far out onto uncharted waters. All technological advances must be examined for possible health hazards, even sanitary advances. For example, the chemicals used to control disease-carrying insects may themselves endanger man. Penetration of the environment by a rising tide of commercial chemicals; adverse effects of noise, dusts, pollen, temperature and humidity; the appalling toll of home accidents-all of these indicate the need for new control measures. The Donora tragedy heightened the Nation's interest in the menace to health from air pollution. The long-term effects of chronic air pollution, as in Los Angeles and other cities, may be even more serious than a brief episode involving a few deaths. Certainly the intensive study of the biological effects of air pollutants is indicated.

Increasing use of radio-active materials in industry and scientific investigation is creating a heavy responsibility to safeguard the present and future generations from the consequences of excessive exposure. There is already great need to establish programs for evaluation of radiation exposure and protective measures.

Shelter, as a means of health, has come to imply more than protection against the natural elements. It should provide a potable supply of water, sanitary disposal of sewage and garbage, healthful atmosphere, temperature, and lighting; quiet and privacy; space enough for safe movement and storage; screening and other protection against pest or disease carriers; safe, fire-proof design and construction; play space, and reasonable access to community facilities in an orderly neighborhood. These are rough specifications of what is meant by the national housing policy approved by Congress, stating that "the health of the people . . . requires a decent home and a suitable living environment . . . for each American family". Despite this policy, one-

third of the Nation's dwellings still have one or more basic health defects.

Our water, air, food, and shelter resources must be developed and preserved with regard to their over-all effect on health, as well as to their immediate economic advantages. In the past, sanitation efforts have been devoted largely to "cleanup", to correct abuses which have already occurred. We have been concerned with water only when sewage renders it unfit to drink; with air after a Donora; with food after epidemic foodborne disease; and with shelter after slums have appeared.

A Positive Approach

The time has arrived for a more positive approach to these health problems. It is no longer sufficient to reclaim water from polluted sources. It is also necessary to develop and protect adequate sources of clean, raw water. In this connection, fluoride content and other health-promoting qualities of water yet to be discovered may be as important in the future as the elimination of disease-causing bacteria has been in the past.

In planning municipal expansion, particularly its industrial components, attention should be given to patterns of air-movement, location and degree of potential air-borne waste, and means of controlling such waste at the source. In this manner the clean air of nature could best be preserved.

Environmental control of the quality of food means more than avoiding bacterial and chemical contamination. It also includes preservation of nutritive values and even the development of more highly nutritive food.

Besides eliminating present slums there is need for satisfactory standards and enforcement measures with respect to future housing, so that we do not create additional slums. Those concerned with environmental safeguards to health should assist in obtaining an adequate supply of new housing within the means of all economic groups.

WE, THEREFORE, RECOMMEND THAT:

- 1. Environmental health authorities participate in municipal and regional planning so that health-maintaining features will be built into new housing, industrial and other construction.
- 2. Research be undertaken to advance basic knowledge of the relationship of environment to health including the effects of housing, air pollution, and radio-active materials; to insure the application of present knowledge in the environmental control of water, milk, and food supplies, in sewage disposal and in insect control; and to

render present control operations more economical.

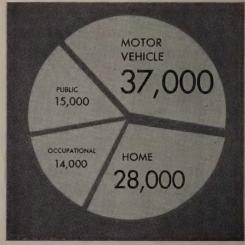
- 3. Training of all categories of personnel required to protect the people against environmental hazards be stimulated.
- 4. A vigorous attack on sanitary aspects of rural life be initiated in order to overcome the present lag in its environmental health protection.

Accidents

Man's carelessness contributes to a sizeable proportion of the medical bill each year. Accidental injuries and death stand out as a preventable cause of disability and death which mars what is often otherwise a favorable health picture. For the children and youth of the Nation accidents rank as the number one cause of death. At nearly all age periods, accidental death is among the first five leading causes of death. The National Safety Council estimates that some $9\frac{1}{2}$ million disabling accidents occurred in 1951, 350,000 of them resulting in permanent impairment.

Accidents thus form an important aspect of the health problem of the American people. Promotion of safety, prevention of accidents, diagnosis, treatment and rehabilitation, are all elements in our approach to the accident problem. Comprehensive health service for any group of the population requires consideration of this matter. The increased tempo of American life makes accident control imperative in order to reduce

94,000 ACCIDENT DEATHS IN 1951



Basic Data From National Safety Council.

the hazards of injury, especially to children, old people, industrial workers and rural people.

Accidents may be classified into four broad groups—home accidents, occupational accidents, motor vehicle accidents, and other public accidents. During the last half century, deaths from many specific types of accident have decreased; but the saving in lives from accidents in some of these categories has been offset by the growing toll of deaths caused by accidents involving the automobile. More than one-third of all fatal accidents are now due to the automobile and another third are due to accidents in the home. Most of the latter occur among children and old persons. Most frequently, fatal home accidents are due to falls—86 percent of them occurring in persons over 65 years of age.

Childhood Accidents

Accidents among children present a growing problem to parents, pediatricians, and others responsible for the health and welfare of children. Three fatal accidents occur among children under 15 years of age every two hours throughout the year. The most frequent cause is motor vehicle accidents, followed by drowning and burns. In the home poisons taken accidentally cause many deaths. Accidents constitute the greatest single threat to children's lives and physical health. Local health departments, safety councils, school officials, together with the general physician, need to cooperate in attacking this scourge of childhood.

Occupational Accidents

Occupational accidents have been of concern to labor, industry, and government for years. While the death rate from occupational accidents has dropped substantially in recent years, the absolute number of such fatalities has remained quite constant. Injury-frequency rates in the various industries ranged in 1950 from 2 per million man-hours for personnel in insurance companies and telephone and financial agencies, to 96 for loggers and 121 for workers in gold and silver mines.

Severity rates (average number of days lost per 1,000 employee-hours worked) were highest in 1950 for logging, 13; structural steel erection and ornamental ironwork, 11; bituminous coal mining, 8; an-

thracite coal mining, 7; heavy construction, 6; and stevedoring, 6. Much lower severity rates prevailed in the service industries. The wide variation of injury-frequency rates and severity rates indicates considerable differences in the extent and control of hazards in the various industries. Injury-frequency rates and severity rates are greater in small plants. Agriculture or farm accidents represent another large group of occupational accidents.

The Motor Vehicle Toll

The cost of motor vehicle accidents in the United States in 1951, as estimated by the National Safety Council, was nearly \$3.5 billion, with 37,000 deaths and more than 1½ million injuries disabling beyond the day of the accident. Medical expense alone is estimated around \$90 million. The States show wide variation in motor vehicle death rates. They are lowest in the New England and Central Atlantic States and highest in the western States. More than a quarter of the fatal motor vehicle accidents involve more than one motor vehicle and another quarter, a pedestrian. Nearly one-half of the children killed in automobile accidents are pedestrians.

Rigid law enforcement, as well as attention to human elements and engineering elements in highway and automobile construction, is required to prevent motor vehicle accidents. In addition to taking a tremendous toll in premature deaths, automobile accidents present a challenge to the physician in the medical problems they pose. First aid instruction and facilities, transportation of the injured, communal blood banks for protection against shock, and total rehabilitation are some of the problems which the medical profession and the community must solve together.

- 1. Prevention of accidents be given a high priority as one of the urgent health problems of the Nation. Federal-State programs for a vigorous attack on prevention of accidents on the highways, in the home, on farms and elsewhere should be formulated and carried out.
- 2. Safety Councils, health departments, professional groups and all others concerned redouble their efforts to reduce America's accident toll.
- 3. Attention be given both to the environmental and human factors in the causation of accidents.

Health Problems of Special Population Groups

Just as we have singled out for particular attention certain special health problems which affect the whole population, so it seems desirable to examine certain groups in the population with health problems which are especially related to each group.

Focusing attention on these groups should not be taken to imply that their health differs fundamentally from that of the rest of the population, or that their health services should differ fundamentally. Rather, it means that the group presents a concentration of particular kinds of problems which deserve emphasis. These groups include mothers and children, industrial workers, rural people, migratory workers, the aging, military personnel, veterans, and other Federal beneficiaries.

Mothers and Children

Today there are more children than at any other time in our history, more than 47 million under 18 years of age. During the decade 1940 to 1950, the number of children under five years of age increased 53 percent. Each year has seen a great improvement in child health. Nevertheless, there remain many deficiencies in health services to the children of this Nation.

Enormous gains have been made in the prevention and cure of disease among children. Child-bearing has never been safer. Many diseases which were once prevalent in the childhood years have now largely disappeared. In fact, the whole base of medical care for children is now changing from the treatment of disease to the promotion of health. We are emerging from an era of activity where physicians, nurses and social workers were rushing about taking care of sick children, to an era when knowledge and time are becoming available to help the well stay well. In short, health care is shifting from the defensive to the offensive.

From our present vantage point we see many needed steps along the road to the objective of good health services for all mothers and children.

First is the need for more well-trained physicians, dentists, nurses, social workers, and others who in their professional capacities assume responsibility for the health and welfare of children. All of these disciplines require still greater emphasis upon the problems peculiar to the emotional and physical growth of children.

Second is the need to overcome the barriers to good medical care which result from geographic and from economic causes. In those sections of the country where physicians, hospitals, and other health resources are deficient, and where per capita income is low, the quantity and quality of health services for children and mothers are proportionately low. Three measures can do much to remedy these inequities: (1) extension of local public health services, (2) provision for special diagnostic and consultation service in pediatrics and obstetrics for rural communities, and (3) regional planning. The first is part of the move to establish local health units throughout the Nation. No matter what other services are included in a local health unit. maternal and child health services invariably receive prominent attention. Regional planning, given special emphasis by the American Academy of Pediatrics as a result of its nation-wide survey of child health services, is one means of creating a direct channel between the urban center and the rural services. It brings to the remote areas the benefits of the latest research, new procedures and high quality services of the medical center.

Third is the need for more research in the field of child life, to improve existing techniques and to raise the standards higher. Particular attention should be given to two factors which still stand as leading causes of death and disability—premature birth and accident.

One long overdue measure for child health is concerted action directed at the problem of the distressingly large number of children who are emotionally disturbed, mentally deficient, mentally ill, or suffering from epilepsy. In no other area of child life has so little progress been made. The problem does not involve the child alone, but rather the child as a member of the family unit. The family must be accepted as the irreducible unit for health service. Unfortunately one out of nine children lives in a home broken because of divorce, separation, or premature death of parents. Such disrupted families often give rise to emotional abnormalities not only in childhood but also in later life.

Vast sums of public money are being spent each year on school health examinations. How often have children and parents been needlessly alarmed because of hasty misinterpretation of some innocuous finding by a school physician? Less time should be spent on perfunctory annual examinations of school children as they are too often performed today. More time should be

devoted to careful health screening and follow-up, neluding medical consultation with parents as well as chool teachers, and to the utilization and development of community resources for diagnosis and treatment. School health programs would then become far more productive of good results.

The goals of child health cannot be met without the cooperative effort of official and voluntary agencies of the community. To attain these goals will require more money for more services. But the answer lies also in better use of existing resources. Continuing effort is needed to evaluate the work of the agencies serving children, and to provide them with guides to improve their programs.

WE, THEREFORE, RECOMMEND THAT:

- 1. Education of general physicians, dentists, nurses, social workers, teachers, and others on the health team include a better understanding of the development of the physical and emotional life of the child and mother. Our general public educational system should emphasize the health aspects of childhood and motherhood.
- 2. Local public health services be extended to cover the entire country, including isolated rural sections.
- 3. Provision be made for an adequate number of hospital beds and nursing care for children of all ages, including special provision for the premature infant.
- 4. Provision be made for diagnostic and consultative services in pediatrics and obstetrics for rural areas and wherever else needed.
- 5. Programs for the care and training of children with mental deficiency and epilepsy be strengthened.
- 6. Research be undertaken into the causes and prevention of childhood accidents; into the effectiveness of health programs for children; into the causes and prevention of fetal mortality, premature birth, neonatal mortality, mental deficiency and epilepsy; and into child development, both emotional and physical.

Industrial Workers

In October 1952, civilian employment in the United States reached nearly 62 million. Of this number, approximately 48 million worked in industry and commerce, i. e., were not self-employed or in agriculture. With their dependents, these workers constituted more than 100 million, or two-thirds of the total population in this country.

Although large enterprises employing thousands of persons are commonly considered to be typical of present-day industry and business, actually most workers are employed in small plants. Of every 100 persons in the labor force during 1948 and covered by social security, 40 persons worked in plants employing less than 50 individuals; another 31 worked in plants employing 50–499. Thus, the "small plant" is still the major locale of employment in this country.

The health of the American worker has been improving steadily over the past several decades. In 1911–12 the future life expectancy of a 20-year-old white male industrial employee insured by one large insurance company was 37 years, whereas today such a worker can look forward to 48 more years of life, a gain of 11 years. Many other advances could be cited, advances reflecting in no small part improvements in the general standard of living. These gains have not been uniform throughout the labor force. Workers in less favored occupations still have higher mortality rates than do those in more favored categories. Death rates increase as the socio-economic scale is descended.

Industrial Disability

Disability takes a large toll among the working population. On an average working day in 1949–50 an estimated 1.2 to 1.6 million persons in the labor force were unable to work because of sickness or other disabling conditions. In addition, a large number of persons of working age are not in the labor force at all because of some disability. Each year we lose about a billion man-days from industry because of disability.

Part of this burden, and perhaps the most preventable part, is due specifically to occupational causes. Accidents and illness recognized as work-connected account for about 10 percent of industrial absenteeism. Although the long-term trend is downward, occupational accidents increased for the second consecutive year in 1951, reaching a total of 2,100,000 injuries. These cost over \$2.7 billion and included 16,000 fatalities. Small manufacturing plants with less than 25 employees have two and one-half times as many accidents, in proportion to the number of employees, as plants with 500 employees or more.

Occupational disease also causes a substantial amount of disability among industrial workers. However, since nine-tenths of sickness absenteeism is due to nonoccupational causes, an industrial health program cannot be concerned solely with occupational accidents and diseases. Attention must be given to the problem as a whole.

Workmen's Compensation

Since 1911, the workmen's compensation laws of the various States have become a keystone in America's industrial health progress. Workmen's compensation systems in the States vary from excellent to grossly inadequate. In 11 States the law applies only to certain listed "hazardous" employments, 4 States give no coverage to occupational diseases, and 18 cover only certain listed diseases. Excessive litigation is common, with both legal and medical chicanery.

Most States have adopted further measures aimed at controlling industrial health hazards. But again these are usually quite unsatisfactory. Eleven States have no factory inspection. Almost all compensation payments are inadequate by present-day standards, particularly in providing for total rehabilitation. In most States a confusing patchwork of laws is reflected in overlapping jurisdictions between health and labor departments. Administrative conflict vitiates a great deal of effort.

A great part of the weakness of our industrial health program stems from the deep social and economic issues inherent in this field. The fact, for example, that the diagnosis of an occupational disease may cause expense to the employer creates an atmosphere in which science often is subordinated to a desire to minimize or even to suppress knowledge which might prove the relationship of occupational environment to a disease.

More Complete Health Service

It has already been noted that preserving the health of industrial workers cannot be limited to controlling accidents and diseases which arise directly out of employment. An industrial worker does not pick up his heart or his lungs or his body at the factory gate when he checks in. Nor does he leave them there when he checks out at the day's end. His health on the job is one-third of the picture of his health throughout the day. Industrial health is tied up with home health.

A more complete health service for the industrial worker would include physical examination at the time of employment to determine the most suitable job placement and to advise the worker concerning any health problems detected; periodic examinations during employment; and investigation and correction of occupational hazards. It would also include education for health and first aid instruction; adequate treatment, including full rehabilitation for injuries and diseases occurring in the course of employment; and effective

tie-up between medical service in the plant and all community health services for the worker and his family.

Although many advances have been made in the direction of a more complete industrial health program, a great deal remains to be accomplished. According to a 1951 survey of 3,589 member companies by the National Association of Manufacturers, only a little over half reported plant-operated medical units. Of the plants employing more than 500 persons, almost 90 percent had in-plant medical services; but only 14 percent employed full-time physicians and less than half had regularly attending part-time physicians. Among the smaller plants, 43 percent had in-plant units, but only 6 percent employed a regularly attending part-time physician.

The nature of the health services offered also varied according to the size of the company. The larger plants offered a much broader range of services than the smaller plants. Since more than two-thirds of our labor force work in small establishments, one of the foremost problems of extending industrial health coverage is to provide health services in small plants.

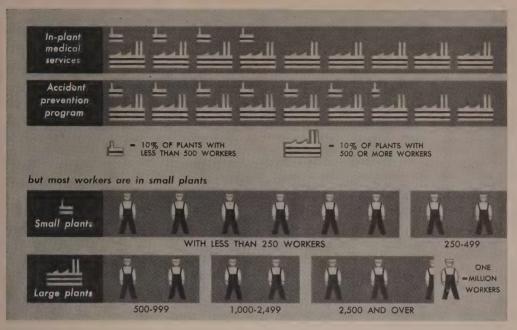
Many obstacles lie in the way of more adequate health services for industrial workers. Labor, although it has taken some steps, has not yet expressed sufficient interest in industrial health programs, especially their preventive aspects. The practical difficulties in organizing an effective health service for small plants are not insignificant. However, these can often be overcome by cooperative arrangements among several small plants, either to establish a central clinic or to employ a physican who serves each plant on a part-time basis.

Only recently have medical and nursing schools begun to give their students adequate orientation in industrial hygiene. Even when called upon, practitioners usually can offer only first aid service and limited physical examinations which do not adequately take job requirements into account. Research into the occupational aspects of health has been undertaken only sporadically in this country. We lag far behind several other nations in analyses of occupational and other socio-economic factors in disease.

Collective Bargaining for Health

One of the most promising recent developments in the industrial health field has been the initiation of health plans under collective bargaining agreements. In general, these are operated by labor or joint labormanagement boards with funds allocated in accordance with collective bargaining agreements. By mid-

LARGE MANUFACTURING PLANTS OFFER BROADER HEALTH SERVICES TO WORKERS THAN DO SMALL PLANTS



Sources: Brookings Institution, "Health Resources in the United States," 1952; National Association of Manufacturers. Population: U. S. Bureau of the Census

1952, about 10 million union members, and in some cases their dependents also, were eligible for some type of prepaid medical or hospital services under such agreements. Employers paid over half a billion dollars during 1952 for these benefits. The extent of these health services and the methods by which they are provided, together with the likelihood that coverage will increase, make these health programs of national importance. Recent surveys indicate that the medical care being provided with these benefits, however, is inadequate in both quantity and quality.

In some cases these agreements have stimulated comprehensive service oriented toward the total (not just occupational) health problem of the industrial worker, even extending in many cases to his family. As yet, however, the funds are generally not sufficient for a comprehensive service and much of the available funds are lost in poorly conceived programs. Achievement of adequate funds and their utilization in effective plans would vastly improve health services for indus-

trial workers and their families, and thus strengthen the health services available to the entire population. WE. THEREFORE, RECOMMEND THAT:

- 1. State workmen's compensation laws be improved so that they provide coverage of all occupations, adequate medical care including rehabilitation, coverage for all injuries and diseases arising from occupational exposure, and assurance of impartial medical diagnosis with a minimum of legalistic procedures.
- 2. In-plant health services be further developed for both large and small industry with consideration to group-practice prepayment medical care plans as one mechanism for providing medical services to small plants.
- 3. Industrial and community medical care plans be extended to bring comprehensive health services to the industrial worker and his family.
- 4. The State and Federal health, safety and labor agencies be strengthened so as to achieve

minimum health standards and an adequate preventive program in all places of work. This requires that the agencies have sufficient investigative, code-making and enforcement powers, and adequate financial support. Overlapping jurisdictions should be eliminated.

- 5. Research and education on industrial accidents and all other occupational aspects of health be greatly increased.
- 6. Reemployment, after rehabilitation, into suitable employment be encouraged by unions through revision of their seniority rules.
- 7. Government, union, industry and professional health agencies study the developing labor-management health plans with a view toward making recommendations which will insure the maximum return in high quality health benefits for each dollar invested. These plans should be related to community services.

Rural People

A recent survey of hospital and medical facilities in one predominantly rural State disclosed these conditions:

The sorest need among major occupational groups was found among farmers; among economic groups—tenant farmers, and among races—the Negro.

A similar situation could be uncovered in nearly all States. Because of various difficulties, rural people have long found it hardest to get satisfactory health services. Because such conditions still exist, some groups are inclined to argue that we must resign ourselves to letting the poorest farmers in the poorest counties get along without the safeguards to life and health which more fortunate groups enjoy. We believe, however, that the greater the difficulty of serving these too-long-disadvantaged people, the greater must be the effort which government and private health agencies must put forth to remove the obstacles.

Special Difficulties

Our proposal that prepayment be the major remedy for the problem of financing health services immediately brings us face to face with these special difficulties among our rural people. Most agricultural workers cannot now buy voluntary health insurance on a group basis because they are for the most part either self-employed or employed individually, seasonally, or in small numbers. To enlist these groups in prepayment plans will thus require extra work, but this extra work must be assumed in order to give these people their inalienable "equal right to life and happiness" and the indispensable safeguards which modern medicine provides.

A second great difficulty is the vicious circle in which all too many rural people in thinly settled areas get caught: they cannot get physicians because there are no hospitals and cannot get hospitals because there are no physicians and maybe cannot get either because of low per capita wealth or income.

A third major problem of our rural areas deserves special mention. Most Negroes still live in rural districts. They have not had their proper share of either medical or hospital services. This situation must be remedied. Negroes must have medical training and recognition in medical organizations. Equality of hospital service must also be achieved for them.

Possible Courses of Action

What are the remedies? To begin with, if we once get universal enrollment in prepayment medical and hospital plans, the problem of paying physicians will be largely solved. Another important remedy is to distribute Government funds for health services and hospital construction so as to insure reasonable "equality of opportunity" for people in poor counties and people in rich counties.

In the Hill-Burton hospital construction program, for example, Federal funds are distributed to the States on the basis of average per capita income. On this basis North Carolina, with 2½ percent of the Nation's population, receives 4½ percent of Hill-Burton funds. Furthermore, this State matches Federal funds and allocates the total amount so that the poorest counties can get Hill-Burton aid by putting up only one-sixth of the total cost of building a hospital, while the richest counties are required to put up 56 percent of the cost.

Even under these conditions, some counties are too small and too poor to support hospitals providing the quality of service required. In such cases several counties might unite in supporting one hospital. In actual practice it has been found very difficult to get such county cooperation. A special study should be made of existing difficulties and possible remedies for such non-service areas.

Thus far, we have considered the matter of providing a proper quantity of medical and hospital care for rural people. No less important is the problem of insuring an adequate quality of service. We would especially stress the importance of writing safeguards into all future legislation and appropriations. It might be wise to require, for example, that the mapping of local

medical service areas be used as a basis for coordinating and integrating rural medical and hospital services with larger medical service centers.

Two inescapable conclusions confront us: (1) Without some small hospitals, many men, women, children and infants in thinly settled rural areas cannot get the physician service they must have in order to protect life and health. (2) We can never be sure of the quality of service in these small hospitals unless they are integrated with larger hospitals and the medical centers of the area. Some State plans for hospital construction under the Hill-Burton program have not given proper attention to this problem.

The Rural Environment

Rural environment only intensifies many health problems shared by the whole Nation. Facts about rural health cannot logically be considered apart from the rural environment—the sparsity of population, long distances to service, relatively low incomes, and other factors.

About one-third (54 million) of the people of the United States live on farms or in communities of less than 2,500. Almost one-half of this rural population is concentrated in the South, where one-fourth of the farm families are Negro. Large families with many children are more commonly found on farms than in cities. The constant migration of young adults from the farm to the city emphasizes the fact that the health of rural children is not a sectional problem alone, and that it is important to the Nation as a whole.

Although the cash incomes of farm families have increased substantially since the early 1930's, the nature of farm operations is making them more and more dependent upon these cash incomes. Three out of five farm families in 1949 had cash incomes of less than \$2,000. The median income of all families on farms was \$1,730, compared with \$2,560 for rural non-farm and \$3,430 for urban families. In 1950 tenants and sharecroppers, who move from one place to another, operated nearly 1.5 million of the Nation's farms.

The low family income among rural people is reflected in living standards generally lower than those in urban areas. Rural families are more likely to live in overcrowded homes without running water, refrigerators, and electricity. Their children are less likely to complete high school than those who grow up in urban communities. In the school year 1949–50, the proportion of children 14–17 years of age not attending school was nearly twice as great in farm areas as it was in urban areas.

Higher birth rates, larger families, lower family income, insecurity of tenure, and lower educational level—all have an impact on the health situation of rural people.

High infant mortality is chiefly found in the rural sections of the country. Minority groups such as Negroes, Indians, or Spanish-speaking Americans are most seriously affected.

In rural Kentucky and West Virginia only about onehalf of the white babies and less than a third of the Negro babies are born in hospitals, as compared with 94 out of every 100 city babies in the country as a whole.

Disabling conditions among workers in agriculture are one-half times greater than among workers in industry. Each year about 14,500 farm people are killed and an additional 1.3 million are injured in accidents. Despite farm work hazards, agriculture is usually exempted from the provisions of workmen's compensation insurance.

Access to Medical Care

In spite of their greater health needs, rural people do not have as ready access to medical care as do city dwellers. Isolated counties have only one-half as many physicians in proportion to population as metropolitan and adjacent counties. Moreover, the physicians serving rural areas are typically older men, many of whom have passed their peak efficiency.

Greater medical purchasing power in the city is only one of the reasons why many physicians turn to city practice. Fear of professional isolation and a relatively lower standard of living in the rural community explains the reluctance of some doctors, particularly those who are city-bred, to practice in a rural community. In general, young physicians prefer to practice in the sort of community from which they originally came. Because relatively few boys and girls from rural communities can afford medical education, and because the low standards of many rural schools disqualify other young people for medical schools, there are proportionately fewer medical students from rural areas than there are from cities.

Predominantly rural States are likewise short of dentists, nurses, and paramedical personnel.

Both hospital service and public health services are at a low level in rural areas. Most of the counties without local public health services in this country are predominantly rural. Metropolitan counties in 1946 had one public health nurse for every 1,500 children;

isolated rural counties had only one nurse for 6,900 children.

Scores of small communities have tried various ways to overcome the local shortage of physicians. Both cultural and living conditions and medical facilities must be improved to attract and hold physicians and other health personnel. As a means of making rural practice more attractive, some community groups have themselves provided small health service centers with offices equipped for one or more physicians. Other communities have guaranteed the physicians a minimum income for the first few years.

Medical and nursing scholarships are now offered in a number of States. They are financed in a variety of ways—by tax funds, contributions of medical societies, funds raised by farm organizations, mutual health insurance funds, or other means.

In the rural areas of the South, there is need not only for scholarships but also for some tutoring system which would assist students from sub-standard rural schools to prepare for the study of medicine, dentistry, and nursing.

WE, THEREFORE, RECOMMEND THAT:

- 1. In the provision of scholarships for students in the health professions, particular attention be given to the needs of rural youth from low-income families.
- In the development of hospital facilities, emphasis be placed upon establishing good working relationships between small rural hospitals and larger medical centers.
- Public health services be extended to all areas of the country, rural as well as urban.
- 4. Rural people throughout the country study their own health problems and seek means of solving them using their own resources. For example, this could be done through equipping offices and guaranteeing a minimum income to the physician, and, as necessary, calling upon State and Federal resources to overcome their economic disadvantages.
- 5. Federal and State grants for hospital and medical services continue to be allocated to help people in the lowest income areas to secure practical equality with other groups.
- 6. General physicians in rural areas establish group practice arrangements, if necessary with specialists in nearby urban areas, in order to bring the benefit of all medical skills more readily to rural people.

Migratory Workers

As many as one million migratory laborers work in this country's fields and orchards each year. Half of them are nationals of Mexico and other neighboring countries. They plant and harvest crops during peak demands for labor and thus contribute significantly to America's productivity.

Yet their incomes and living conditions are deplorable. In 1949, counting perquisites, the average migratory farm worker received \$550 as total earnings for 101 days of labor, compared with \$2,866 for 245 days of labor by the worker in manufacturing industry. Migrants move from county to county and State to State, taking advantage of seasonal employment opportunities but losing residence status for basic health and welfare services which are available generally to people who have established residence in the areas.

The periodic influx of migrants into these areas overwhelms the existing arrangements, and even the resources, designed for meeting the needs of local people. Completely inadequate facilities for housing and sanitation characterize the nomadic life of most of these people, although some recent advances have been made in this regard. To see them, family after family, camped along ditches is still not uncommon in our Western states.

Living as they do, and disadvantaged by previous life and educational opportunities, their need for health services is much greater than that of the resident population. Some employers of migratory laborers have made an effort to improve their conditions of life, but generally whatever has been done has resulted from governmental action.

- 1. The Federal government recognize its responsibility and assist in solving the health problems of migratory labor. This should be done through developing a satisfactory plan in cooperation with State and local governments, employers and voluntary agencies; through allocation of funds to help carry out such plans with no discrimination on account of legal residence status; and, wherever necessary, through establishing direct Federal health services.
- Governments of States with substantial populations of migratory workers establish and enforce adequate standards of housing and sanitation in migrant camps.

The Aging

The presence of more than 13 million persons in the United States past 65 years of age has focused attention on a whole new set of health problems. Our aging population reflects health progress and yet, paradoxically, manifests some of the greatest health needs.

Before giving attention to the specific health needs of the aging, it is well to consider the basic social conditions of this group.

Although many of our institutions are crowded with elderly people, about 94 percent of those past 65 years still live in individual homes. These tend to be in poorer physical condition than those of younger people. One-quarter of older people live alone or with non-relatives.

The long-term trend of declining employment for the aging in the United States (briefly reversed during World War II) is continuing. In 1900, 68 percent of the men over 65 were gainfully employed; in 1950, only 42 percent of such men were either employed or seeking work.

The aging receive income from four main sources. Thirty percent of those 65 years and over receive income from employment (as earners or wives of earners); one-fifth, from old age assistance (public tax funds); one-third, from Old-Age and Survivors Insurance (an insurance system administered by the Federal government) and related programs; and an unknown number, from personal savings and annuities. In addition, there is a large group with no cash income which is dependent on children or other relatives for support. For the one-fifth of the people 65 years and over receiving old age assistance in 1951, the average monthly grant was \$44.54. For the one-fourth receiving Old-Age and Survivor's Insurance benefits, the average monthly amount was \$42.16.

The total cash income of about two-thirds of all persons in the United States over 65 years of age is less than \$1,000 per year. Hence, only a small proportion of those over 65 years of age can be considered more than marginally independent, with inflation rapidly reducing this margin. With such severely restricted income, nutrition and other aspects of living are bound to suffer.

In addition to inferior housing, declining employment, and meager income the aging face increasing exclusion from family and social life.

Disease Among the Aging

Aging and disease should be sharply distinguished. Aging leads to senescence and ultimately death. However, there are no "degenerative" diseases which inevitably accompany this process. A fatalistic attitude toward diseases among the aging is unjustified scientifically and in practice impedes progress.

The effects of disease upon the aging differ from the effects on younger people. This is due both to unfavorable elements in the environment of older people and to the fact that they have lost some of their constitutional resilience. The aging are subject not only to the usual acute conditions, but especially to cancer and to several progressive diseases of the nervous system (e. g., paralysis agitans), vascular system (e. g., arteriosclerosis), internal glandular system (e. g., diabetes), and eyes (e. g., cataract).

Older people have more long-term illness and are disabled for longer periods of time than younger people. The close interrelationship between disease and socio-economic conditions among the aging is wellestablished.

One of the most serious manifestations of ill health among elderly people, especially those from cities and towns, has been the rapid increase in their admission rate to hospitals for the mentally ill. Often they are condemned to admission to such institutions because of relatively minor mental aberrations which are reversible and even preventable by proper care.

A Two-Pronged Attack

In spite of a serious burden of disease among the aging much can be done. Their health problems require a two-pronged attack:

- (1) Prevention of the accumulation of diseases and disabilities among the aging.
- (2) Alleviation of diseases among older people today.

Among preventive measures deserving emphasis is accident prevention, for example by controlling environmental hazards in the home and by correcting vision and hearing defects. Organized recreation, education, and social activities have been demonstrated to curtail sharply the mental disturbances "expected" among the aging. Improved nutrition, especially an adequate supply of protein and vitamins, will also contribute to their better health. Just as among younger people, early diagnosis and care will often prevent disability as well as prolong life.

The present extent of disease and disability among the aging is so great that services aimed at restoration and alleviation deserve high priority. Most health care for the aging can and should be given while they are living in their own homes. Adequate diagnostic and evaluation service while the patients are ambulatory is fundamental. This service should include a study of physical, emotional, and social aspects of the aging person's health, and should extend to evaluation of work capacity and counselling. Rehabilitation to maximum social usefulness should be the goal irrespective of age.

Many elderly persons, of course, do require health services which can be provided only in institutions. General hospital care with intensive medical service is needed for long-term illness as well as acute illness. Because of the frequently prolonged convalescence, nursing homes play an important role in the care of the aging. These should be differentiated from custodial institutions where emphasis is placed on attendant care with only a minimum of medical and nursing care provided.

Some communities have developed outstanding examples of health services for aging people. In at least one county hospital, a rehabilitation program for aging patients has benefited hundreds of patients who in other "county homes" would be almost entirely neglected. Many have been discharged to their homes and others rehabilitated to the point of self-care. Other hospitals have organized special geriatrics clinics.

Difficulties in Health Services for the Aging

In general, however, health services are woefully inadequate in quantity and quality for the aging, wherever they may live. Older people often find clinics overcrowded and impersonal; it is not uncommon for the aging patient to see a different physician at each visit. Comprehensive care is rarely offered. In the rural areas an inferior standard of care for "indigents" is common.

General hospitals, in serving the aging, are faced with the fact that long-term stays exhaust the usual personal financial resources, and then throw a burden on the hospital.

Studies conducted in 1946 and 1949 showed, for couples past 65 who were receiving Old-Age and Survivors Insurance benefits, an average health services bill of \$160 per year. One-fourth of them had medical and hospital bills of more than \$200. Only about one out of every eight of the couples in these

studies had any form of hospital or medical care insurance

Hence, the availability of funds for payment of medical care is at the heart of the health situation of older people. They are considered "bad risks" by insurance organizations and even if eligible the premiums would usually be beyond their means.

Use of Public Funds

Thus, adequate medical care can be provided only through substantial use of public funds. One recent step alleviated the situation somewhat. A 1950 Amendment to the Social Security Act provided for the inclusion in the monthly old age assistance grant of medical care expenditures direct to vendors. However, the Federal government cannot contribute to grants above \$55, the present matching maximum. Current prices of other necessities such as food, shelter, and clothing are so high that not much can be expected for medical care from this source.

It is clear that the solution to the problem of payment for health services to the aging does not lie in currently available private insurance programs with premiums paid by the aging. Nor does it lie in any reasonably anticipated increase in cash benefits under old age assistance or Old-Age and Survivors Insurance. Rather, the situation requires a new approach—one supported largely by public funds specifically earmarked for health care.

- 1. Funds in required amount be specifically earmarked for health services for the aging. Main emphasis should be on diagnostic and other services for patients living in their own homes in order that every opportunity be utilized to keep the aging people outside of institutions. Studies should be made of the use of prepayment methods for health services for the aging.
- 2. Adequate standards and methods of payment using public funds for long-term hospital and affiliated nursing home care be developed.
- Present discrimination against the aging in rehabilitation and other health services, as well as in other aspects of community life, be minimized.
- 4. Employment of the aging as long as they desire to work and are capable of it be considered a highly desirable health measure.
- 5. That there be community planning by health councils and other agencies of well-rounded services for the aging including counselling, educa-

tion and recreation in addition to specific health services.

- 6. Studies be made of the relationship of housing to the health and safety of the aging.
- 7. Facilities for senile patients be developed so that patients suffering from senility alone can be removed from hospitals for the mentally ill.

The Armed Forces

Military medicine is now of major importance among the medical problems facing the Nation. In the interval between World War I and World War II, the medical departments of the Navy and Army (then including the Air Force) were reduced to a numerically low level. During World War II the military medical services were so expanded that at one time fully 40 percent of the active physicians in the country were in the Armed Forces. The number was markedly reduced during demobilization but has now risen again. The history of the medical departments of the Armed Services, like that of the Armed Services themselves, has been characterized by these severe fluctuations.

However, since there will probably not be any considerable lessening of military activities in the near future, the military will continue to call for a substantial number of civilian physicians each year. Every able-bodied young physician who is not exempt by reason of being a veteran will probably have to serve some time in the Armed Forces. The requirements for other personnel—dentists and nurses particularly—have a similarly important impact on the Nation's health problems.

Care of Dependents

One of the most controversial aspects of military medicine today is the care of military dependents. By gradual evolution rather than as a clear-cut policy, the military has now assumed substantial responsibility for medical and hospital care for the dependents of military personnel. This, of course, has come about as a matter of necessity in some places where no proper civilian facilities exist. Approximately one-tenth of the military medical resources are devoted not to military, but to non-military personnel and dependents.

During World War II the burden upon civilian medicine was so great that it was glad to relinquish the care of these dependents to a military establishment. Once this policy was established it proved difficult to discontinue the practice. From the point of view of the military, the care of dependents has an important

bearing on the morale of the soldier. Indirectly it represents a considerable increase in pay for those soldiers who have families. From the point of view of the military physician it permits him to have a much more varied practice than that which would be possible if his efforts were confined to soldiers alone.

However, the drafting of physicians and dentists for military service with the result that the services of some of them are utilized to a great extent for the care of civilians has disturbed the health professions. This whole matter needs a complete and definitive review: First, to determine what the Government's responsibility shall be to military dependents; and secondly, to decide in what way this responsibility shall be discharged.

Drafting the Professions

The medical, dental, and veterinary medical professions have been singled out among all the professions under the provisions of Public Law 779 for military draft service simply because they are physicians, dentists, or veterinarians. This law was enacted in response to the insistent demand of the military who found themselves unable to fill their requirements by voluntary enlistment. This law, which will expire in July 1953, has not proven entirely satisfactory to either the military or the civilian interests. Before that time a complete revision will be necessary in order to make it acceptable.

The cooperative efforts that are being made now by the military forces, professional associations, and others to achieve an appropriate revision of the law should be continued. The provisions of this law depend in part upon the establishment of a policy concerning the care of military dependents. If the care of this group of patients is returned to civilian physicians, the number required for military medicine will be somewhat less. Protection of medical and dental school faculties is necessary in order that the continuing flow of graduates into the professions may be safeguarded.

Widespread complaints from the physicians who were taken into the Armed Forces during World War II indicated improper utilization of their services. Some of this was inevitable in view of the extraordinarily rapid expansion of the Armed Services during this period, but the lack of advance planning and deficiencies in administration were also partly responsible for this malutilization of professional time and capabilities. Unification of the Armed Services was expected to improve operations in the medical field more than in

any other area. Such hopes have not been fully realized. Certain advances have been made in the direction of unification with consequent saving of personnel and material, but they have fallen far short of what was anticipated. The utilization of physicians in the Armed Forces at present is a great deal better than during World War II. Military authorities are well aware, however, that the problem has not been completely solved.

The many medical activities of the military services are well done; the care of the sick soldier is competently handled; and the treatment of the wounded is superb, exceeding even the high standards set in World War II. We note particularly the tremendous improvement in the transportation of the wounded and their speedy arrival at well-equipped and well-staffed central hospitals.

WE, THEREFORE, RECOMMEND THAT:

- 1. The problem of health personnel for the military forces be made the subject of further and continuous study by such agencies as the Health Resources Advisory Committee.
- The question of proper utilization of military medical personnel be given the closest attention by military authorities in order to eliminate needless demands and the waste of valuable personnel.
- 3. A clear-cut policy be made by law concerning the care of military dependents. If it is decided that these military dependents are a proper charge of the Government, the desirable solution would be provision of prepaid health service policies for medical care which would be provided by local private physicians.
- 4. A revision of Public Law 779 in order to provide more equitable drafting of physicians, dentists, and veterinarians should be enacted by Congress after consultation with the military, with representatives of the professions, and with educational authorities. We do not believe it just to draft physicians from civilian practices who then treat civilians under the auspices of the military, nor is it proper to jeopardize our future supply of health professionals.
- 5. Unification, particularly in the use of hospital facilities and scarce personnel, be further developed and extended to include the administrative organization for health within the Defense establishment.

Veterans and Other Federal Beneficiaries

In mid-1952, the number of Federal beneficiaries eligible for health care from the Federal government reached approximately 25 million. Of this number, about $3\frac{1}{2}$ million represent those now in the Armed Forces; about $19\frac{1}{2}$ million, veterans; and the remainder are merchant seamen, Indians, and other groups.

Some eight major agencies of Government are responsible for spending approximately \$1.5 billion annually for health services. Aside from military medicine, the major health programs which this Government operates at the present time include those of the Veterans Administration, the Public Health Service, and the Indian Service.

Veterans Administration

During 1952 the Veterans Administration employed an average of approximately 120,000 people to care for an average daily patient load of 98,000 veterans in hospitals and 16,900 in domiciles. It also cared for a monthly average of 127,300 patients in clinics, and 20,200 patients needing dental care. A substantial amount of medical and dental care is purchased on a fee-for-service basis under the home-town medical and dental care programs: medical care for 66,000 patients per month, dental examinations for 16,500 patients per month, and dental treatment for 25,200 patients per month.

The Veterans Administration hospital facilities consist of approximately 120,000 beds, only 110,200 of which are in operation. These are scheduled to expand to 131,000 beds when the present building program is completed. In addition, there are about 18,000 beds in domiciles.

Estimates of future requirements of the Veterans Administration in-patient load, as of the year 1975, have ranged from 130,000 in-patients to as many as 233,000. The lower figure will require about the same resources as those required when the present building program is completed.

In the course of time, if present policies are continued, a large portion of the population will be eligible for care by the Veterans Administration. At present, the Veterans Administration assumes entire responsibility for the care of service-connected disabilities. In addition, the veteran with a non-service-connected disability may receive hospitalization if he signs a statement that he is unable to pay for services privately rendered. This whole situation calls for an immediate

and definitive review looking toward the establishment of a clear-cut policy which specifies precisely the extent of the Government's obligation to veterans. Only when such a policy has been established can proper planning for veterans' care be undertaken.

If the Federal government is to assume responsibility for the total medical care of all veterans, the present tremendous structure of the Veterans' Administration will have to undergo even greater expansion to care for the load that will inevitably arise in future years as the veterans increase in number and become older. If direct medical care is to be given only for service-connected disabilities, the facilities and personnel required will be much less. If a decision is made to extend the home-town-care of veterans by means of prepaid medical and hospital care, with care provided in their own communities and by their own physicians, the load upon the Veterans Administration will be substantially reduced. Congress must make these fundamental determinations of policy prior to definite planning for the future medical and surgical services of the Veterans Administration.

It seems quite likely that, with the passing of years, development of health deficiencies accompanying senility will require the utilization of all the present veterans' hospitals for the care of patients with such disturbances as well as mental illness. This may be the ultimate and best use of the present veterans' facilities.

In any event, no realistic estimate can be made until there is a precise definition of Federal responsibility for the non-service-connected patient. The present open-ended definition makes Federal care available, generally speaking, to veterans with non-service-connected disabilities when a bed is available. Such a policy results in inequities to veterans who live in areas with fewer beds, and has resulted over the past twenty years in the building of more and more veterans' hospitals.

Estimating shortages of physicians, dentists, nurses, and other personnel for the present load is quite difficult, but recently there were vacancies requiring 500 full-time physicians, 30 dentists, and more than 800 nurses. Whether the Veterans Administration can reach ideal staffing levels does not depend solely upon the availability of personnel. It also hinges upon the ability of the organization to attract people into its program through good salaries and working conditions, and upon continuing appropriations by the Federal government.

Health Service for Indians

Medical care of the Indians since 1849 has been administered by the Bureau of Indian Affairs of the Department of the Interior. It presents one of the most difficult problems in the administration of a medical care program for a particular group of people in this country. The 400,000 Indians of this country, now living to a large extent under conditions of extreme poverty on isolated reservations, probably manifest the worst health conditions in the United States. in 1948-49 tuberculosis constituted the leading cause of death at all ages from 5 to 50 years and ran a close second in the 1-to-4-year age group. Tuberculosis, syphilis, whooping cough, diarrhea and other preventable diseases caused relatively 2 to 10 or more times as many deaths among Indians as among the white population. In 1949 the infant death rate among Indians was three times as high as that for the United States as a whole.

During the fiscal year 1951, admission to general hospitals totaled more than 53,000, and in addition, 1,183 patients were admitted to tuberculosis facilities. While improvements generally have been made in the health of the Indians, funds for this purpose have been inadequate. The program has been handicapped by conflicting policies regarding the responsibility of this Government to Indians.

Transfer of responsibility for medical care of Indians to the Public Health Service has been recommended by various agencies that have studied the problem as a means of improving their care. In addition, more physical facilities are urgently needed to provide care to the Indians. Consideration should be given to providing adequate numbers of helicopters and other vehicles which can bring the Indian on the periphery of the reservation closer to medical care. Funds for case-finding surveys should be increased in order to minimize preventable and treatable conditions which now exist among the Indians to a greater extent than among any other segment of the population. There is a great need for better educational programs among the Indians to make medical care more understandable and more acceptable to them.

Public Health Service

The forerunner of the present Public Health Service was established in 1798 with a program for the care of sick and disabled seamen. From this beginning the size and scope of the Public Health Service has steadily expanded. Now it is organized under four bureaus.

The Office of the Surgeon General is primarily concerned with general administration; the National Institutes of Health, with scientific research; the Bureau of Medical Services, with programs of hospital and medical care and related activities; and the Bureau of State Services, with Federal-State health programs. In recent years the Public Health Service has been given increasing responsibility for health administration—the Hospital Survey and Construction Act, training programs for professional workers, grants-in-aid to initiate and improve local health programs, and international health activities. Its direct medical care programs have been decreasing in relative importance.

The principal beneficiaries of direct health care are seamen of the U. S. Merchant Marine. In 1951, over 69,000 patients received in-patient care in Public Health Service hospitals: 63,000 in general hospitals, almost 6,000 in neuropsychiatric hospitals, 700 in tuberculosis

hospitals, and 115 admitted to the Leprosarium in Carville, La. This number of admissions produced an average daily patient load of 7,350 patients in 42 hospitals and institutions with a bed capacity of 10,293.

- 1. The Congress establish a clear-cut policy with respect to the responsibility of the Federal government for the care of veterans, especially those with non-service-connected disabilities.
- 2. Preference be given to the care of the veteran in his own community through a home-town program including hospitalization.
- 3. No expansion of veterans' hospital facilities be undertaken except in relation to the over-all hospital needs of the country.
- 4. Responsibility for the medical care of Indians be transferred to the Public Health Service.

FEDERAL HEALTH COMMISSION

Assessing this Nation's health resources and health needs in the brief span of one year has been a gigantic task. In the course of the year's work, however, we have learned much which may be useful for future reference.

None of us had any idea when we started our work that we would run into so many significant areas in which there are demonstrable, well-documented health needs. This applies in almost equal measure to personnel, physical facilities, organization, research, financing, and special problems. The hundreds of medical and other experts who came to our Washington sessions and to the public hearings around the country presented testimony as to the many weaknesses in our health services. To those who assert that there is no real health problem and therefore no need for this kind of study, we say: The thousands and thousands of pages of testimony which are part of the Commission's official record disprove that point of view.

Our task was much more difficult than we first anticipated because of the great gaps in our knowledge about many aspects of the health situation and services in this country. This Nation has really just begun to inventory its health status and potential. Of the studies to which we were able to turn, many had been done on a spot basis—Congress had set up a group to do a quick survey of one area, the Public Health Service had done a study in another area, a private organization had tackled a third problem. There were patches here and patches there, and a lot of gaps in between. There was no long-range plan behind all of it, and no real attempt to survey the entire fast-changing pattern of medical care in America.

In a sense, we were appointed to do a spot job. We have wrestled earnestly with our task, but at the year's end we see the incompleteness of it.

Need for a Continuing Commission

Just as there is a need for a continuing inventory of our labor force, our industrial potential and our farm productivity, so there is a tremendous need for a continuous study and critical assessment of this Nation's health resources and needs. That this is widely felt is reflected in the fact that, during the past few years, several bills have been introduced in the Congress outlining in some detail the functions of a continuing Commission to make just such a study.

A permanent Federal Health Commission would in no way duplicate any of the functions of a Federal department concerned with health. The latter would be primarily an administrative organ of Government, while the Commission would fill the very important role of constant critic and evaluator. It can be likened to a grand jury which seeks and hears all of the evidence and then makes recommendations. Since the Commission must be free to study and criticize the performance of existing health agencies, including a Federal department, it must be absolutely free of any official ties with governmental agencies.

It became more and more clear, as our investigation proceeded, that probably at no time will it be possible to produce a comprehensive and final report that can be regarded as definitive. There is need for a continuing study of the health needs of the Nation and of the practicable means of meeting them. These needs will change from year to year with changes in the economic and social conditions of our society.

In few areas of American life is there as much ferment and experimentation going on as in our concepts and techniques in the delivery of medical care. The means for dealing with health will change. It is certain that progress will be made in medical science, in medical education, in the medical arts and organization, and in many of the auxiliary health professions and services. Moreover, the characteristics of some diseases may change, and the relative incidence and importance of causes of illness and death will change. It will, therefore, be necessary for our national welfare to have in progress a constant, searching assessment of needs and resources for a health program.

Scope of the Commission

We envisage the task of this Commission in broad terms. Interest in health is not confined to the professions concerned with the delivery of health services. Every segment of our national life now has a deep stake in better medical care for all. Industry as a whole, which is investing millions of dollars each year in health and welfare benefits and accident prevention programs, must be represented on such a council. Labor, which has conducted a militant campaign for comprehensive health care for the workingman, must be represented. Farm organizations and rural communities, now in the midst of imaginative planning for more physicians, hospitals and health insurance for their people, must be represented.

All this means that a Commission charged with the study of health needs, resources, and problems must be composed of both professional and lay personnel. Not only the knowledge and wisdom thereby to be directed to the subject, but also the active cooperation of lay, community, and professional organizations are essential to the development of adequate health measures.

Congress should establish a permanent Federal Health Commission composed of from 12 to 18 members appointed by the President with the approval of the Senate. The term of office should be six years, with one-third of the terms expiring every two years. Not more than half the members should be health professionals, and no member should be an officer or employee of either the Federal or a State government. The Commission should elect a Chairman and a Vice-Chairman from among its members. The Commissioners should receive no salaries, but should be compensated for each day spent performing official duties.

In order to carry out its sizeable responsibilities, the Commission should be provided with adequate monies by the Congress. It should have the power to appoint a small central staff to carry out technical studies. It

should also be authorized to retain part-time consultants and to contract for technical studies with such public and private agencies as it deems necessary in its work. The Commission should also have the power to hold public hearings either in Washington, D. C., or in other parts of the country.

It should be the duty of the Commission to make a formal annual report to the President and the Congress on the health status and health needs of the American people, including recommendations for legislation whenever this is indicated.

State and Local Commissions

In proposing a permanent Federal Health Commission, we wish also to emphasize the importance of comparable health planning bodies on the State and local levels. Several States now have planning commissions of this kind, and their work has been invaluable. In local communities, the recent growth and increasing effectiveness of voluntary local health councils representing a multiplicity of citizens' organizations provides much valuable experience in this field. The leadership developed in this movement might be utilized in setting up these regional health commissions.

Recommendations

- 1. The Congress establish a Federal Health Commission.
- 2. Comparable bodies be established in the States and local communities.

OF RECOMMENDATIONS

Throughout the pages of this report, we have emphasized our awareness of the considerable costs of the health program we advocate. We have also made clear our belief that this country can well afford these expenditures; that in fact the Nation cannot afford to neglect the measures for which these funds would be used. In the better health of our people and increased productivity these expenditures would lead to a net saving.

We have given attention to what the total costs might be and made rough estimates of the Federal government's share in support of the proposed programs, except for support of mental disease and tuberculosis care. These figures are presented not as definitive but as an indication of the magnitude of the job before us.

In connection with the Federal share of this program, recent experience with grants-in-aid for health has demonstrated that Federal assistance greatly stimulates State and local support. For example, during the period 1937–1951, Federal aid for general public health activities increased from \$8 million to \$13.5 million; during this same period State and local funds for general public health activities rose from \$25 million to \$140 million.

At present the Federal government spends just over \$1 billion each year for civilian health activities, including medical care for veterans and other Federal beneficiaries, hospital construction, public health, medical research, rehabilitation, and training of health personnel. The health program projected in this report when completely put into effect would require an annual Federal expenditure of approximately \$1 billion more, as indicated below:

Training of health personnel, including modernization and expansion of physical facilities, scholarships and aid for operations	\$100, 000, 000 77, 000, 000
and environmental health activities Medical research	60, 000, 000 20, 000, 000
Assistance in development of better or- ganization of health services through regional coordination	10,000,000
Grants-in-aid to the States to assist in the provision of personal health	
Other, including support of programs for industrial health and migratory workers as well as the Federal	750, 000, 000
Health Commission	1,000,000
Total	\$1,018,000,000

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